### MATERIAL SAFETY DATA SHEET

# COTRONICS PROPRIETARY BRAZING BINDER 4B

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

#### **SECTION ONE**

Chemical Name And Synonyms: Braze Binder

Formula: N/A

Chemical Family: Acrylic Polymers

Comments: N/A

#### **SECTION 2: COMPOSITION INFORMATION**

 Non-Hazardous:
 CAS#
 %

 Acrylic Polymers
 N/R
 20 - 50%

 Toluene
 108-88-3
 30 - 50%

 Xylene
 133-02-7
 20 - 40%

Oral and Dermal LD > 5.2g/ kg and 3.95g/kg (Rat)

Inhalation LC > 6350ppm for 4 Hour (Rat)

#### **SECTION 3: PHYSICAL PROPERTY INFORMATION**

Appearance: Milky Liquid Odor: Toluene 32°F Melting Or Freezing Point: **Boiling Point:** 212°F Vapor Pressure: Water Vapor Density (Air=1): 3.2 Solubility In Water: Sliaht % Volatile (By Weight): 70 - 80% Solubility in Organic Solvent: Yes Evaporation Rate (Butyl Acetate=1.9): < 1 Specific Gravity (Water=1): .09 - 1.2

#### SECTION 4: FIRE AND EXPLOSION HAZARD DATA

Flash Point: 40°F.

**Lower Explosion Limit (%):** N/A. **Upper Explosion Limit (%):** N/A.

Extinguishing Media: All Standard Firefighting Media.

Special Firefighting Procedures: Flammable. Wear Respiratory Protection If In A

Confined Area.

DATE PREPARED: 9/17/93 DATE REVISED: 08/05/05

#### **SECTION 5: HEALTH HAZARD DATA**

**Effects Of Overexposure:** Low degree of toxicity by Inhalation.

Eye Contact: Causes Mild eye irritation. Skin Contact: Wash with mild soap.

**Ingestion:** Low degree of toxicity by Ingestion.

Medical Conditions Aggravated: Not Known.
Chronic Effects Of Over Exposure: Not Known.

#### **Emergency And First Aid Procedures:**

*Ingestion:* If swallowed, do not induce vomiting. Keep at rest and get medical attention. *Skin:* Remove contaminated clothing and launder before reuse. Wash with soap and

water. Get Medical attention if irritation persists. *Inhalation:* If inhaled remove to fresh air,

Eyes: In case of contact, immediately flush eyes with plenty of water for at least 15

minutes and get Medical attention if irritation persists.

#### **SECTION 6: REACTIVITY INFORMATION**

Stability: Stable.

Hazardous Polymerization: Will not occur.
Hazardous Decomposition Products: Acrylic Monomers.
Incompatibility (Materials to Avoid): None Known.

**Conditions To Avoid:** Keep away from heat and cold open flames.

#### **SECTION 7: SPILL OR LEAK PROCEDURES**

Dike and absorb spill on inert material (sand, earth, etc.). Transfer diking material to containers for disposal. Wear protective clothing. Wash clothing before reuse. **Waste Disposal Methods:** Landfill or incinerate material in accordance with local, state and federal regulations.

#### **SECTION 8: SPECIAL PROTECTION INFORMATION**

**Ventilation Type:** Normal room ventilation.

**Respiratory Protection:** None required if good ventilation is maintained.

Protective Gloves: Impervious.

Eye Protection: Chemical splash goggles (ANSI Z-871 or approved equivalent).

Other Protective Equipment: Eyewash facility.

#### **SECTION 9: SPECIAL PRECAUTIONS**

Store away from excessive heat (e.g., steam-pipes, radiators, from sources of ignition and open flames). Do not store near food or feed.

#### DOT Hazard Class Flammable Liquid UN 1294 and UN 1993

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HIMS RATING Health = 2 Fire = 3 Reactivity = 0 HAZARD RATING: 0 = Insignificant 1 = Non-Toxic, Slight 2 = Moderate 3 = High 4 = Extreme

## MATERIAL SAFETY DATA SHEET

### **Cotronics Corporation** Replicast 101MR

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

**SECTION 1: PRODUCT IDENTIFICATION** 

Chemical Name And Synonyms CAS # **OSHA ACGIH** PEL TLV 1,1,1,2-T NE\* 811-97-2 40-60 1000ppm **Dimethyl Ether** 115106 40-60 1000 ppm NF\* Aliphatic Hydrocarbon 8052-41-3 4-10 400ppm 500ppm

\*NE Non Established

All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

#### PHYSICAL DATA

As Supplied

Boiling Point (°F): N/A Vapor Density (Air=1): 2.6 Specific Gravity Range (H2O=1): 0.989

(%) Solubility in Water: Partially soluble

Appearance/Odor: Clear, colorless liquid with faint ethereal odor

Vapor Pressure (mm Hq.):  $@70 \, ^{\circ}\text{F} = 69 \, \text{psig}$ 

**HEALTH HAZARD DATA** 

**Routes of Entry Skin: Yes** Inhalation: Yes Ingestion: Not likely

Potential acute health effects of overexposure

Eve: Eye contact with liquid or vapor may cause severe irritation,

redness, tearing, blurred vision, and possible freeze burns.

Skin: Skin contact with the liquid may cause freezing of the

skin (frostbite) or irritation.

Inaestion: Indestion not a likely route of entry

Inhalation: Overexposure by inhalation of concentrated vapors may

> cause respiratory irritation, nausea, headache, and dizziness. Inhalation of may produce anesthetic effects and feeling of euphoria. Prolonged overexposure can cause rapid breathing, headache, dizziness, narcosis, unconsciousness and death from asphyxiation, depending on concentration and time exposure.

DATE PREPARED: 11/01/85 DATE REVISED: 02/23/06

### **Emergency and First Aid Procedures**

Eyes: Immediately rinse eyes with running water for 15 minutes.

If irritation develops, get medical attention. Consult

physician immediately if frostbite occurs.

Skin: Wash affected area with soap and water. Remove and

launder contaminated clothing before reuse. Treat as

frostbite. If irritation develops or if there is evidence of

tissue

damage, get medical attention.

Inhalation: Remove to fresh air. If breathing has stopped, restore

breathing at once. Administer oxygen and get immediate

medical help.

Ingestion: Ingestion is an unlikely route of exposure. Do not induce

vomiting unless instructed to do so by a physician. Seek

immediate medical attention.

SECTION 7: SPILL OR LEAK PROCEDURES

Waste Disposal Method: Dispose of in accordance with local, federal and state

regulations.

SECTION 8: SPECIAL PROTECTION INFORMATION

Respiratory Protection (Specify Type): NIOSH approved\* Respirators

recommended for spray applications.

Ventilation: Local Exhaust: As needed to keep vapor concentrations below TLV's. Protective Gloves: Impervious gloves with MYLAR-coated Durafab (2nd Choice PVA or neoprene) for repeated exposure.

Eye Protection: Proper eye protection should be worn in any type of industrial

operation.

**SECTION 9: SPECIAL PRECAUTIONS** 

Precautions to be taken in Handling and Storing: Do not puncture, incinerate, expose to open flame or temperature above 120°F. Keep out of direct sunlight.

Other Precautions: Read label precautions. For industrial use only. Keep out of reach of children. Contents are under pressure.

\*(Reference 1984-85 ACGIH TLV Booklet, Page 34). Appropriate ventilation should be provided and protective equipment should be worn in compliance with OSHA standard currently 29 CFR 1910.134 (NIOSH approved, air purifying, half mask or full face-piece respirator with appropriate filter pad or cartridge(s)).

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HIMS RATING Health = 1 Fire = 0 Reactivity = 0 HAZARD RATING: 0 = Insignificant 1 = Non-Toxic, Slight 2 = Moderate 3 = High 4 = Extreme

### MATERIAL SAFETY DATA SHEET COTRONICS CORPORATION Replicast 101 Part A

#### SECTION 1 CHEMICAL PRODUCT / COMPANY INFORMATION

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

Product Name: Replicast 101 Part A

Formula: N/A Comments: N/A

Chemical Family: Polyurethane Elastomer

**SECTION 2: COMPOSITION INFORMATION** 

Component CAS# Wt. % TWA **OSHA PEL** Butyl benzyl phthalate 85-68-7 65-70 % N/A N/A Polymethylene polyphenyl isocyanate 9016-879 10-15 N/A N/A 4,4' Methylene bis(phenylisocyanate) 101-68-8 20-25 0.005 ppm 0.02 ppm

All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive

**SECTION 3: PHYSICAL DATA** 

**Boiling Point** (ØF): None Determined **Freezing/Melting Point**:: None Determined

Specific Gravity Range (H2O=1): 1.10

**Vapor Pressure (mm Hg.):** < 0.00001 @ 25° C

Vapor Density (Air=1):8.6Viscosity:1 poiseSolubility in Water:NegligibleEvaporation Rate (=1):N/A

Appearance/Odor: Brown Liquid, Characteristic odor

% Volatile: N/A

#### **SECTION 4: FIRE AND EXPLOSION HAZARD DATA**

Flash Point (Method Used): 390° F (200° C)

Flammable Limit: N/A

**Unusual Fire and Explosive Hazards:** Hazardous decomposition products may be formed. Avoid water contamination in closed containers or confined areas as exothermic heat and carbon dioxide can evolve.

Extinguishing Media: Water Fog, Dry Chemical, Carbon Dioxide Foam

Lower explosion limit: Not established Upper Explosion Limit: Not established Sara Section 313 Supplier Notification:

This product contains the following chemical (s) subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1968 and of 40 CFR 372: Refer to the Hazardous Ingredients section of this MSDS for the appropriate CAS numbers.

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HIMS RATING Health = 2 Fire = 0 Reactivity = 1

#### SECTION 5: HEALTH HAZARD DATA

**Primary Entry Routes:** Inhalation and Dermal

Target Organs: Lung, skin

**Acute Effects of Inhalation:** Vapors are minimal due to low vapor pressure. Excessive exposure can cause irritation to respiratory tract and irritation of the eyes. Effects may be delayed. Decreased ventilatory capacity has been associated with exposure to similar isocvanates.

**Eye:** May cause irritation, redness tearing blurred vision. Prolonged vapor contact may cause conjunctivitis.

**Skin:** Contact will cause irritation, reddening, swelling, rash, scaling or blistering. Prolonged or repeated contact can cause moderate dermatitis.

**Ingestion:** May have corrosive effects on the linings of lining of the mouth and stomach: symptoms may cause sore throat, abdominal pain, nausea, vomiting, and diarrhea

Carcinogenicity: IARC, NTP and OSHA do not list any of these components as a carcinogen.

**Medical Conditions Aggravated by Long Term Exposure**: Skin allergies and respiratory disorders.

#### **SECTION 6: FIRE, EXPLOSIVE AND REACTIVITY DATA**

**Stability:** Stable at room temperature in closed containers under normal strorage and handling conditions.

*Incompatibility (Materials To Avoid)*: Avoid contamination with water and other materials that react with isocyanates.

*Hazardous Decomposition Products*: MDI vapors, Hydrogen cyanide gas, oxides of nitrogen, carbon monoxide and carbon dioxide.

Hazardous Polymerization: Can occur

#### **SECTION 7: SPILL OR LEAK PROCEDURES**

**Spill or Leak Procedures:** Only properly protected personnel should remain in spill area: dike and contain spill, absorb or scrape up excess into suitable container for disposal, wash are with dilute ammonia solution. Stop or reduce discharge if it can be done safely.

Regulatory Requirements: Follow applicable OSHA regulations (29 CFR 1910.120)

#### SECTION 8: SPECIAL PROTECTION INFORMATION

**Respiratory Protection (Specify Type):** NIOSH approved\*. Respirators recommended for spray applications. Air purifying respirators do not protect workers in oxygen - deficient atmospheres.

**Ventilation:** Local Exhaust: Vacuuming with the vacuum exhaust passing through a high efficiency particulate arresting (HEPA) filter is the exhaust is discharged into the workplace.

**Protective Clothing:** chemically protected gloves, boots, aprons, lab coats to prevent prolonged or repeated contact. Wear safety glasses or chemical safety goggles. **Eve Protection:** Recommended.

#### **SECTION 9: SPECIAL PRECAUTIONS**

**Precautions To Be Taken In Handling And Storing:** Keep container closed and avoid getting wet until ready to use.

**Other Precautions:** Wash Hands Thoroughly Before Eating Or Smoking. Avoid Getting Powder In Body Openings, Including Cuts, Sores, Mouth, Etc. Use With Adequate Ventilation. Avoid Repeated Skin Contact. Wash Skin Thoroughly After Handling.

DATE PREPARED: 01/01/89 DATE REVISED: 02/23/06

HAZARD RATING: 0 = Insignificant 1 = Non-Toxic, Slight 2 = Moderate 3 = High 4 = Extreme

# COTRONICS CORPORATION 3379 Shore Parkway Bklyn, N. Y. 11235 718-646-7996 FAX 718-646-3028

To	Whom	lt l	May	Concern:
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Please be advised that there is no formal Material Safety Data Sheet available on our product #102 MR as this is an edible food quality grease.

Thank You, Cotronics Corporation

# MATERIAL SAFETY DATA SHEET COTRONICS CORPORATION

#### Mold Release 103 MR

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

**SECTION ONE** 

Chemical Name and Synonyms: See Below

Formula: Mixture of Specialty Solvents

Chemical Family: Specialty Solvent

Comments: N/A

All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

**SECTION 2: COMPOSITION INFORMATION** 

Threshold value 400ppm TWA (ACGIH)

Hazardous Materials: None Listed

Nature of Hazard: N/A

**SECTION 3: PHYSICAL PROPERTY INFORMATION** 

Appearance/Odor: Colorless thin liquid, Sharp alcoholic odor

Melting Or Freezing Point: NA
Boiling Point: 180 °F

Vapor Pressure:37 mm/hg at 68°FVapor Density (Air=1):2.0 (Air = 1)Solubility In Water:Complete% Valatile (Pre Values):250

% Volatile (By Volume) : > 85% Evaporation Rate (Ether=1) : < 2

Specific Gravity (Water=1): 0.80 at 68°F

**SECTION 4: FIRE AND EXPLOSION HAZARD DATA** 

Flash Point: 53°F

Method Used: TCC, flammable liquid

Lower Explosion Limit (%): 2% Upper Explosion Limit (%): 12%

Extinguishing Media: CO2 Foam or Dry Chemical

**Dot Classification:** Combustible(UN1219,Class 3 PGII)

Special Firefighting Procedures: Flammable/Wear Respiratory Protection if in a

Confined Area.

**Unusual Fire and Explosion Hazard** flammable liquid, vapors may be ignited by heat, sparks, flames or static electricity. Container may rupture if exposed to extreme heat.

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#### **SECTION 5: HEALTH HAZARD DATA**

**Effects of Overexposure:** 

**Excessive Inhalation**: if high concentrations can cause nose and throat irritation.

dizziness, weakness, fatigue headache.toxicity by inhalation

Eye Contact: Causes mild eye irritation.

Skin Contact: Prolonged contact causes irritation sensibility.

Ingestion: Irritation of the gastrointestinal tract and possible kidney effects, vomiting

Medical Conditions Aggravated: Not Known. Chronic Effects of Over Exposure: Not Known.

Carcinogenicity: No ingredients identified as a carcinogen or potential carcinogen by

NTP. IARC. or OSHA.

**Emergency and First Aid Procedures:** 

Ingestion: Induce vomiting. Drink milk or water and get medical attention.

Skin: Remove contaminated clothing and launder before reuse. Wash with soap and

water. Get Medical attention if irritation persists.

*Inhalation:* If inhaled, remove to fresh air, if not breathing give artificial respiration, preferably mouth-to-mouth. If breathing is difficult give oxygen and get medical

attention

Eyes: In case of contact, immediately flush eyes with plenty of water for at least 15

minutes and get Medical attention if irritation persists.

#### **SECTION 6: REACTIVITY INFORMATION**

Stability: Stable

Hazardous Polymerization: Will not occur

Hazardous Decomposition Products: Combustion liberates C0, C02

Conditions To Avoid: Keep away from heat, sparks, sunlight and open flame.

Incompatibility (Materials To Avoid): Strong oxidizing agents.

#### **SECTION 7: SPILL OR LEAK PROCEDURES**

Dike and absorb spill with inert material (sand, earth, etc.). Transfer diking material to containers for disposal. Wear protective clothing. Use breathing apparatus

(MSHA/NIOSH approved, pressure-demand, self-contained) or air mask for large spills

in confined area. Wash clothing before reuse.

Waste Disposal Methods: Landfill or incinerate material in accordance with local, state and federal regulations.

#### **SECTION 8: SPECIAL PROTECTION INFORMATION**

Ventilation Type: Normal room ventilation.

**Respiratory Protection:** None required if good ventilation is maintained.

Protective Gloves: Impervious.

Eye Protection: Chemical splash goggles (ANSI Z-871 or approved equivalent).

Other Protective Equipment: Eyewash facility.

#### **SECTION 9: SPECIAL PRECAUTIONS**

Keep containers closed, Store in cool, dry well ventilated area for laboratory or office use. Avoid heat and direct sunlight. Store away from excessive heat (e.g., Steam-pipes, radiators, from sources of ignition). Do not store near food or feed. Do not mix with other cleaning agents.

DATE PREPARED: 6/11/92 DATE REVISED: 02/23/06

HIMS RATING Heath = 0 Fire = 2 Reactivity = 0 HAZARD RATING: 0 = Insignificant 1 = Non-Toxic, Slight 2 = Moderate 3 = High 4 = Extreme

### MATERIAL SAFETY DATA SHEET

## **RESBOND Solvent** 105RS

### **FDA Approved Solvent**

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

#### SECTION ONE

**OSHA Chemical Name And Synonyms** CAS# PEL Aliphatic Hydrocarbon 64742-48-9 85-95% 300ppm 74-98-6 Propane 5-15 1000ppm

\* N/E=Non Established

All materials contained within are listed on the TSCA Inventory list

This product is compliant with the RoHS Directive. .

**SECTION 2: PHYSICAL DATA** 

As Supplied

Boiling Point (°F): 160-175°F Vapor Density (Air=1): >1

Specific Gravity Range (H2O=1): 0.78 (%) Solubility in Water:

Appearance/Odor: Clear, colorless liquid with faint Hydrocarbon odor

Vapor Pressure (mm Hg.): 38 psig

**SECTION 3: FIRE AND EXPLOSION HAZARD DATA** 

Flammable Limit: LEL 4.0% UEL 25.0%

Do Not Spray Near Open Flame

Flash Point: >100°F. **Auto Ignition Temp:** N/A Lower Explosion Limit (%): N/A **Upper Explosion Limit (%):** N/A

**Extinguishing Media:** Foam, C02, Dry Chemical, Water Spray Keep people away. Isolate fire area and deny Fire Fighting Instructions:

unnecessary entry. Stay upwind. Keep out of low areas where gasses (fumes can accumulate.

Contain firewater run-off if possible.

#### **SECTION 4: HEALTH HAZARD DATA**

Effects Of Overexposure:

Inhalation: Mist or vapor can irritate the nose and throat. Dizziness, Nausea, and

headache.

Eve contact: Irritating to eyes.

**Skin Contact**: Temporary irritation, defatting of skin. *Ingestion*: Unlikely problem since product is a aerosol.

**Delayed Effects**: Prolonged or repeated exposure can cause allergic reaction.

#### **SECTION 5: EMERGENCY AND FIRST AID PROCEDURES**

*Inhalation:* Move subject to fresh air. Give artificial respiration if breathing has stopped. **Eve and Skin Contact:** Flush eves with a large amount of water for at least 15 minutes. Get prompt medical attention. Wash skin thoroughly with soap and water. Remove and wash clothing before reuse.

#### SECTION 6: REACTIVITY INFORMATION

Stability: Stable **Hazardous Polymerization:** Will not occur

Incompatibility (Materials to Avoid) None

Conditions to Avoid: Avoid direct sunlight or ultraviolet sources. Avoid

open flames, welding arcs, or other high temp. Sources which induce thermal decomposition.

#### SECTION 7: SPILL OR LEAK PROCEDURES

Steps to be taken in case material is spilled or released: Evacuate areas until vapor has dispersed. Remove all sources of ignition. Stop or reduce discharge if it can be done safely.

Waste Disposal Methods: EMPTY FULLY including release of pressure. Do not puncture or incinerate. Dispose material in accordance with local, state and federal regulations.

#### **SECTION 8: SPECIAL PROTECTION INFORMATION**

**Ventilation Type:** Normal room ventilation.

**Respiratory Protection:** None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH- approved or equivalent) suitable for concentrations and types

of air contaminants encountered. Protective Gloves: Impervious.

**Eve Protection:** Chemical splash goggles (ANSI Z-871 or approved equivalent).

Other Protective Equipment: Eyewash facility.

#### **SECTION 9: SPECIAL PRECAUTIONS**

Store in a cool, dry, well ventilated area away from excessive heat (e.g., steam-pipes, radiators, from sources of ignition, and from reactive materials). Do not store above temperatures of 120 °F. Keep out of reach of children.

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DATE PREPARED: 1/01/02 DATE REVISED: 02/23/06

HIMS RATING Heath = 1 Fire =3 Reactivity = 0 HAZARD RATING: 0 = Insignificant 1 = Non-Toxic, Slight 2 = Moderate 3 = High 4 = Extreme

# MATERIAL SAFETY DATA SHEET COTRONICS CORPORATION

#### **RESBOND 105 RF**

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

**SECTION 1** 

Chemical Name And Synonyms: Butyl Benzyl Phthalate

Formula: N/A

Chemical Family: Oxygenated Hydrocarbon

Comments: N/A

All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

SECTION 2: COMPOSITION INFORMATION

A. Hazardous Materials:

Butyl Benzyl Phthalate CAS# 85-68-7 Approx. %: 100
ACGIH TLV: N/A OSHA PEL: N/A

B. Nonhazardous

SECTION 3: PHYSICAL PROPERTY INFORMATION

Appearance/Odor: Clear Liquid/Aromatic

Melting Or Freezing Point:N/ABoiling Point:698 °FVapor Pressure:NegligibleVapor Density (Air=1):10.8

**Solubility In Water:** (20 °F) Insoluble

% Volatile (By Volume): 0
Solubility In Organic Solvent: Yes
Evaporation Rate (Butyl Acetate=1): < 0.01
Specific Gravity (Water=1): 1.1
Density: 9.3 #/Gal

**SECTION 4: FIRE AND EXPLOSION HAZARD DATA** 

Flash Point: > 390°F Lower Explosion Limit (%): N/A Upper Explosion Limit (%): N/A

Extinguishing Media: All Standard Firefighting Media

Special Firefighting Procedures: Flammable. Wear Respiratory Protection If in a

Confined Area.

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#### **SECTION 5: HEALTH HAZARD DATA**

Effects Of Overexposure: Low Degree Of Toxicity By Inhalation.

**Eye Contact:** Causes Mild Eye Irritation. **Skin Contact:** Wash With Mild Soap.

Ingestion: Low Degree Of Toxicity By Ingestion.

Medical Conditions Aggravated: Not Known.

Chronic Effects of Over Exposure: Not Known.

Carcinogenicity: No ingredients identified as a carcinogen or potential carcinogen by

NTP, IARC, or OSHA.

#### **Emergency And First Aid Procedures:**

Ingestion: If swallowed and symptoms develop, get medical attention.

Skin: Remove contaminated clothing and launder before reuse. Wash with soap and

water. Get Medical attention if irritation persists.

*Inhalation:* If inhaled, remove to fresh air, if not breathing give artificial respiration, preferably mouth-to-mouth. If breathing is difficult give oxygen and get medical

attention.

Eyes: In case of contact, immediately flush eyes with plenty of water for at least 15

minutes and get Medical attention if irritation persists.

#### **SECTION 6: REACTIVITY INFORMATION**

Stability: Stable

Hazardous Polymerization: Will not occur.

Hazardous Decomposition Products: Carbon monoxide. Carbon dioxide.

Incompatibility (Materials To Avoid): None known.

Conditions To Avoid: Keep away from heat, sparks and open

f lame.

#### **SECTION 7: SPILL OR LEAK PROCEDURES**

Dike and absorb spill on inert material (sand, earth, etc.). Transfer diking material to containers for disposal. Wear protective clothing. Use breathing apparatus (MSHA/NIOSH approved, pressure-demand, self-contained) or air mask for large spills in confined area. Wash clothing before reuse. Destroy clothing that cannot be decontaminated (i.e. Shoes).

Waste Disposal Methods: Landfill or incinerate material in accordance with local,

state and federal regulations.

#### **SECTION 8: SPECIAL PROTECTION INFORMATION**

Ventilation Type: Normal room ventilation.

**Respiratory Protection:** None required if good ventilation is maintained.

Protective Gloves: Impervious.

Eve Protection: Chemical splash goggles (ANSI Z-871 or approved equivalent).

Other Protective Equipment: Eyewash facility.

#### **SECTION 9: SPECIAL PRECAUTIONS**

Store away from excessive heat (e.g., steam-pipes, radiators, from sources of ignition) Do not store near food or feed.

DATE PREPARED: 5/11/92 DATE REVISED: 02/23/06

HIMS RATING Heath = 1 Fire = 1 Reactivity = 0 HAZARD RATING: 0 = Insignificant 1 = Non-Toxic, Slight 2 = Moderate 3 = High 4 = Extreme

# MATERIAL SAFETY DATA SHEET COTRONICS CORPORATION

#### SAFETY SOLVENTS 105 RP and 105 RS BULK

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

#### **SECTION ONE**

Chemical Name And Synonyms: See Below

Formula: Mixture of Specialty Solvents

Chemical Family: Specialty Solvent

Comments: N/A

All materials contained within are listed on the TSCA Inventory list

This product is compliant with the RoHS Directive. .

#### **SECTION 2: COMPOSITION INFORMATION**

Hazardous Materials: None Listed

Nature Of Hazard: N/A

#### **SECTION 3: PHYSICAL PROPERTY INFORMATION**

Appearance/Odor: Pail Yellow Mobil Liquid/Orange

Melting Or Freezing Point: N/A

**Boiling Point:** 176 °C

Vapor Pressure: 1.2 mm/hg At 20°C

Vapor Density (Air=1): 4.7

Solubility In Water: Insoluble
% Volatile (By Volume): > 80%
Solubility In Organic Solvent: Yes
Evaporation Rate (Ether=1): <1

Specific Gravity (Water=1): 0.84 At 25°C

#### SECTION 4: FIRE AND EXPLOSION HAZARD DATA

Flash Point: 115°F Method Used: TCC Lower Explosion Limit (%): 1%

**Extinguishing Media:** CO<sub>2</sub> Foam Or Dry Chemical

**Dot Classification:** Combustible

Special Firefighting Procedures: Flammable/Wear Respiratory Protection If In A

Confined Area.

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#### **SECTION 5: HEALTH HAZARD DATA**

Effects Of Overexposure: Low Degree Of Toxicity By Inhalation.

Eye Contact: Causes Mild Eye Irritation.

Skin Contact: Prolonged Contact Causes Irritation Sensibility.

Ingestion: Irritation Of The Gastrointestinal Tract And Possible Kidney Effects. Low

Degree Of Toxicity By Ingestion.

Medical Conditions Aggravated: Not Known. Chronic Effects Of Over Exposure: Not Known.

Carcinogenicity: No ingredients identified as a carcinogen or potential carcinogen by

NTP, IARC, or OSHA.

**Emergency And First Aid Procedures:** 

**Ingestion:** Do not induce vomiting. Drink milk or water and get medical attention. **Skin:** Remove contaminated clothing and launder before reuse. Wash with soap and

water. Get Medical attention if irritation persists.

*Inhalation:* If inhaled, remove to fresh air, if not breathing give artificial respiration, preferably mouth-to-mouth. If breathing is difficult give oxygen and get medical

attention

Eyes: In case of contact, immediately flush eyes with plenty of water for at least 15

minutes and get Medical attention if irritation persists.

#### **SECTION 6: REACTIVITY INFORMATION**

Stability: Stable

Hazardous Polymerization: Will not occur

Hazardous Decomposition Products: Combustion liberates C0, C02

Conditions To Avoid: Keep away from heat, sparks, sunlight and open flame. Incompatibility (Materials To Avoid): Strong oxidizing agents and acids. Keep in a

closed container.

#### SECTION 7: SPILL OR LEAK PROCEDURES

Dike and absorb spill on inert material (sand, earth, etc.). Transfer diking material to containers for disposal. Wear protective clothing. Use breathing apparatus

(MSHA/NIOSH approved, pressure-demand, self-contained) or air mask for large spills in confined area. Wash clothing before reuse.

**Waste Disposal Methods:** Landfill or incinerate material in accordance with local, state and federal regulations.

#### SECTION 8: SPECIAL PROTECTION INFORMATION

**Ventilation Type:** Normal room ventilation.

**Respiratory Protection:** None required if good ventilation is maintained.

Protective Gloves: Impervious.

Eye Protection: Chemical splash goggles (ANSI Z-871 or approved equivalent).

Other Protective Equipment: Eyewash facility.

#### **SECTION 9: SPECIAL PRECAUTIONS**

Store away from excessive heat (e.g., Steam-pipes, radiators, from sources of ignition). Do not store near food or feed. Do not mix with other cleaning agents.

DATE PREPARED: 6/11/92 DATE REVISED: 02/23/06

HIMS RATING Heath = 0 Fire = 2 Reactivity = 0 HAZARD RATING: 0 = Insignificant 1 = Non-Toxic, Slight 2 = Moderate 3 = High 4 = Extreme

### **MATERIAL SAFETY DATA SHEET COTRONICS EPOXY RESIN**

#### **RESBOND 105 RT**

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

#### **SECTION ONE**

**Chemical Name:** N/A

Proprietary Modified Ether **Chemical Family:** 

Chemical Formula: N/A

All materials contained within are listed on the TSCA Inventory list

This product is compliant with the RoHS Directive. .

#### SECTION 2: COMPOSITION INFORMATION

Appearance/Odor: Amber Transparent Liquid

Melting Or Freezing Point: N/A **Boiling Point:** > 300 °F Vapor Pressure (mm Hg): N/A

Vapor Density (Air=1): >1 Solubility In Water: Nealiaible

Negligible % Volatile (By Weight): Specific Gravity (Water=1): 1.1

Evaporation Rate (Butvl Acetate=1): Negligible

#### **SECTION 3: FIRE AND EXPLOSION HAZARD DATA**

Flash Point:  $> 200^{\circ}F$ Auto Ignition Temp: N/A Lower Explosion Limit (%): N/A Upper Explosion Limit (%): N/A

Extinguishing Media: Foam, C02, Dry Chemical: Water Spray

#### SECTION 4: HEALTH HAZARD DATA

#### Effects Of Overexposure:

Inhalation: Mist or vapor can irritate the nose and throat.

Eye Contact: Substantially irritating to eyes.

Skin Contact: Substance is moderately irritating and can cause superficial burns after

prolonged contact. Not absorbed in toxic amounts. Ingestion: Possibly harmful if swallowed. LD > 4.5 g/Kg.

**Delayed Effects:** Prolonged or repeated exposure can cause allergic reaction.

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#### **SECTION 5: EMERGENCY AND FIRST AID PROCEDURES**

*Inhalation:* Move subject to fresh air. Give artificial respiration if breathing has stopped. Eye And Skin Contact: Flush eyes with a large amount of water for at least 15 minutes. Get prompt medical attention. Wash skin thoroughly with soap and water. Remove and wash clothing before reuse.

*Ingestion:* If swallowed dilute by giving 2 glasses of water to drink. See a physician. Never give anything by mouth to an unconscious person.

#### SECTION 6: REACTIVITY INFORMATION

Stability: Stable

**Hazardous Polymerization:** Will Not Occur

#### **SECTION 7: SPILL OR LEAK PROCEDURES**

Dike and absorb spill on inert material (sand, earth, etc.). Transfer diking material to containers for disposal. Wear protective clothing. Use breathing apparatus (MSHA/NIOSH approved, pressure-demand, self-contained) or air mask for large spills in confined area. Wash clothing before reuse. Destroy clothing that cannot be decontaminated (i.e. Shoes).

Waste Disposal Methods: Incinerate liquid in approved equipment. Landfill or incinerate contaminated diking material in accordance with local, state and federal regulations.

#### **SECTION 8: SPECIAL PROTECTION INFORMATION**

Ventilation Type: Normal room ventilation.

Respiratory Protection: None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH approved or equivalent) suitable for concentrations and types of air contaminants encountered.

Protective Gloves: Impervious.

**Eve Protection:** Chemical splash goggles(ANSI Z-871 or approved equivalent).

Other Protective Equipment: Evewash facility.

#### **SECTION 9: SPECIAL PRECAUTIONS**

Store away from excessive heat (e.g., steam-pipes, radiators, sources of ignition, and from reactive materials). Do not store near food or feed. Corrosive to copper and brass on long storage.

Corrosive Material: Avoid all eye and skin contact.

Misc Info: The use of this and auxiliary materials should be confined to designated work areas. Emptied containers may still contain hazardous residues.

Note To Physician: Allergic dermatitis or respiratory response in susceptible individuals may be delayed even weeks or months after frequent and/or prolonged contact. Acute effects can include mucosa damage, severe larvngeal edema, and shock associated with corrosive agents. Possible mucosa damage may contraindicate the use of gastric lavage.

DATE PREPARED: 11/01/85 DATE REVISED: 02/23/06

HIMS RATING Heath = 1 Fire = 1 Reactivity = 0 HAZARD RATING: 0 = Insignificant 1 = Non-Toxic, Slight 2 = Moderate 3 = High 4 = Extreme

### **MATERIAL SAFETY DATA SHEET** COTRONICS CORPORATION

#### 111 HEAT BLOCK COMPOUND **FSP 211 FIRE STOP COMPOUND**

Manufacturers Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

#### **SECTION ONE**

Chemical Name and Synonyms: N/A Mixture

Chemical Family: Alumina silicate, Alumina, or Silicate

Chemical Formula: N/A

See Section 9 Comments:

All materials contained within are listed on the TSCA Inventory list

This product is compliant with the RoHS Directive. . .

#### SECTION 2: COMPOSITION INFORMATION

WT. % TVL/PEL A. As Manufactured: Refractory Ceramic Fiber 100 2 f / cc

B. After Normal Use See Section 8

#### **SECTION 3: PHYSICAL DATA**

Boiling Point (°F): N/A Vapor Density (Air=1): N/A Specific Gravity Range (H<sub>2</sub>O=1): N/A Percent Volatile By Volume: N/A (%) Solubility in Water: Insoluble Evaporation Rate (H<sub>2</sub>O=1): N/A

Appearance/Odor: No Odor. Red or Blue Putty

Vapor Pressure (mm Hq.): 0.2 - 1.2

#### SECTION 4: FIRE AND EXPLOSION HAZARD DATA

Extinguishing Media: N/A Flash Point (Method Used): N/A Flammable Limit: N/A **Unusual Fire And Explosive Hazards:** LEL = N/ASpecial Fire Fighting Procedures: UEL = N/A

#### **SECTION 5: HEALTH HAZARD DATA**

**Primary Route Of Entry:** Inhalation, Ingestion and Skin Irritation. Effects Of Overexposure: Currently, there are no known chronic health effects in humans from long term exposure to refractory ceramic fibers. Animal studies to date are inconclusive. However, based on limited testing, refractory ceramic fibers are a suspected carcinogen in laboratory animals. The Thermal Insulation Manufacturers Association (TIMA) is sponsoring animal inhalation studies as well as epidemiological studies of workers in the industry. Until definite answers become available, strict

adherence to recommended safe work practices described elsewhere in this MSDS is advised. This product contains minor amounts of binders which burn out during first

heat up. Emergency and First Aid Procedures Terminate Exposure.

**SECTION 6: FIRE, EXPLOSIVE AND REACTIVITY DATA** 

N/A

**SECTION 7: SPILL OR LEAK PROCEDURES** 

Recommended Procedures: N/A

Waste Disposal Method: Routine Housekeeping

#### SECTION 8: SPECIAL PROTECTION INFORMATION

Respiratory Protection (Specify Type): Dust respirator in compliance with OSHA Standard currently 29 CFR 1910.134 (NIOSH Approved, air purifying, half mask or full face-piece respirator with appropriate filter pad or cartridge (s)).

Ventilation: Local Exhaust: Follow OSHA Standard 29 CFR 1910.94 Mechanical (General): Follow OSHA Standard 29 CFR 1910.94

Protective Gloves: Recommended.

Eve Protection: Goggles/Safety Glasses Recommended.

Other Protective Equipment: Long Sleeve, Loose Fitting Clothing and Barrier Cream.

Material does not appear on NTP and/or LAC lists of reports for Carcinogens.

#### **SECTION 9: SPECIAL PRECAUTIONS**

Precautions To Be Taken During First Exposure To Heat: Trace temporary organic binders will burn off during the first exposure to heat. (500-1000°F). Carbon monoxide. carbon dioxide, oxides of nitrogen, reactive hydrocarbons and a small amount of formaldehyde may accompany binder burn-off. Use adequate ventilation or other precautions to eliminate vapors resulting from binder burn-off. Exposure to burn-off fumes may cause respiratory tract irritation.

Precautions To Be Taken After Use And Upon Removal: This product as manufactured is an alumina silicate which could transform upon heating to mullet and crystobalite (a form of crystalline silica). Removal of this product after use may result in the generation of dust. Repeated inhalation of respirable free crystalline silica dust may cause delayed lung injury (silicosis). The recommended TLV/PEL for free crystalline silica is derived from the formula: 10 ma/cu m

1/2(----)#

% Respirable quartz + 2

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<sup>\*(</sup>Reference 1984-85 ACGIH TLV Booklet, Page 34). Appropriate ventilation should be provided and protective equipment should be worn in compliance with OSHA standard currently 29 CFR 1910.134 (NIOSH approved, air purifying, half mask or full face-piece respirator with appropriate filter pad or cartridge(s)).

# MATERIAL SAFETY DATA SHEET COTRONICS EPOXY RESIN

#### **BORON NITRIDE** 112 Brush On

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

#### **SECTION ONE**

Chemical Name: N/A

Chemical Family: Proprietary Boron Nitride

Chemical Formula: N/A

All materials contained within are listed on the TSCA Inventory list

This product is compliant with the RoHS Directive. .

#### SECTION 2: PHYSICAL PROPERTY INFORMATION

Appearance Odor: White Paint Melting/Freezing Point: No data Boiling Point: >100°C

Vapor Pressure (mm Hg): Same as Water

Vapor Density (Air=1): >1

Solubility In Water: Soluble % Volatile (By Weight): 80%
Specific Gravity (Water=1): 1.1

Evaporation Rate (Butvl Acetate = 1): Same as Water

#### SECTION 3: FIRE AND EXPLOSION HAZARD DATA

Flash Point: N/A
Auto Ignition Temp: N/A
Lower Explosion Limit (%): N/A
Upper Explosion Limit (%): N/A

Extinguishing Media: Foam, C02, Dry Chemical: Water Spray.

#### **SECTION 4: HEALTH HAZARD DATA**

#### Effects Of Overexposure:

Inhalation: Mist or vapor can irritate the nose and throat.

Eye contact: Substantially irritating to eyes.

Skin Contact: Substance is moderately irritating after prolonged contact. Not absorbed

in toxic amounts

**Ingestion**: Possibly harmful if swallowed.

**Delayed Effects**: Prolonged or repeated exposure can cause allergic reaction.

#### SECTION 5: EMERGENCY AND FIRST AID PROCEDURES

**Inhalation:** Move subject to fresh air. Give artificial respiration if breathing has stopped. **Eye And Skin Contact:** Flush eyes with a large amount of water for at least 15 minutes. Get prompt medical attention. Wash skin thoroughly with soap and water. Remove and wash clothing before reuse.

*Ingestion:* If swallowed dilute by giving 2 glasses of water to drink. See a physician. Never give anything by mouth to an unconscious person.

#### **SECTION 6: REACTIVITY INFORMATION**

**Stability:** Stable **Hazardous Polymerization:** Will not occur.

#### **SECTION 7: SPILL OR LEAK PROCEDURES**

Absorb spill on inert material (sand, earth, etc.). Transfer diking material to containers for disposal. Use breathing apparatus (MSHA/NIOSH approved, pressure-demand, self-contained) or air mask for large spills in confined area.

**Waste Disposal Methods:** Incinerate liquid in approved equipment. Landfill or incinerate contaminated diking material in accordance with local, state and federal regulations.

#### **SECTION 8: SPECIAL PROTECTION INFORMATION**

**Ventilation Type:** Normal room ventilation.

**Respiratory Protection:** None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH- approved or equivalent) suitable for concentrations and types of air contaminants encountered.

**Protective Gloves:** Impervious.

Eye Protection: Chemical splash goggles (ANSI Z-871 or approved equivalent).

Other Protective Equipment: Eyewash facility.

#### **SECTION 9: SPECIAL PRECAUTIONS**

Store away from excessive heat (e.g., steam-pipes, radiators, from sources of ignition, and from reactive materials. Do not store near food or feed.

**Misc Info:** The use of this and auxiliary materials should be confined to designated work areas. Emptied containers may still contain hazardous residues.

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DATE PREPARED: 1/01/93 DATE REVISED: 02/23/06

HIMS RATING Heath = 1 Fire = 0 Reactivity = 0 HAZARD RATING: 0 = Insignificant 1 = Non-Toxic, Slight 2 = Moderate 3 = High 4 = Extreme

# MATERIAL SAFETY DATA SHEET COTRONICS EPOXY RESIN

#### **BORON NITRIDE SPRAY 112**

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

#### **SECTION ONE**

Chemical Name: N/A

Chemical Family: Proprietary Boron Nitride

Chemical Formula: N/A

All materials contained within are listed on the TSCA Inventory list

This product is compliant with the RoHS Directive. .

#### **SECTION 2: PHYSICAL PROPERTY INFORMATION**

Appearance Odor:

Melting/Freezing Point:

Boiling Point:

Vapor Pressure (mm Hg):

Vapor Density (Air=1):

White Spray

No data

No data

Solubility In Water:

% Volatile (By Weight):

Specific Gravity (Water=1):

Negligible
80%

Evaporation Rate (Butvl Acetate = 1): Same as Ether

#### **SECTION 3: FIRE AND EXPLOSION HAZARD DATA**

Do Not Spray Near Open Flame

Flash Point: >100°F.

Auto Ignition Temp: No data.

Lower Explosion Limit (%): No data.

Upper Explosion Limit (%): No data.

Extinguishing Media: Foam, C02, Dry

Chemical: Foam, Co2, D
Water Spray.

#### **SECTION 4: HEALTH HAZARD DATA**

Propellant Contains Isobutane 106-97-8 Acetone 67-64-1 Propellant 74-98-6 Alcohol 64-17-5

Effects Of Overexposure:

*Inhalation*: Mist or vapor can irritate the nose and throat.

Eye contact: Substantially irritating to eyes.

Skin Contact: Substance is moderately irritating after prolonged contact. Not absorbed

in toxic amounts

*Ingestion*: Possibly harmful if swallowed. LD > 4.5 g/ Kg.

**Delayed Effects**: Prolonged or repeated exposure can cause allergic reaction.

#### **SECTION 5: EMERGENCY AND FIRST AID PROCEDURES**

**Inhalation:** Move subject to fresh air. Give artificial respiration if breathing has stopped. **Eye And Skin Contact:** Flush eyes with a large amount of water for at least 15 minutes. Get prompt medical attention. Wash skin thoroughly with soap and water. Remove and wash clothing before reuse.

*Ingestion:* If swallowed dilute by giving 2 glasses of water to drink. See a physician. Never give anything by mouth to an unconscious person.

#### **SECTION 6: REACTIVITY INFORMATION**

Stability: Stable Hazardous Polymerization: Will not occur.

#### **SECTION 7: SPILL OR LEAK PROCEDURES**

Absorb spill on inert material (sand, earth, etc.). Transfer diking material to containers for disposal. Use breathing apparatus (MSHA/NIOSH approved, pressure-demand, self-contained) or air mask for large spills in confined area.

**Waste Disposal Methods:** Incinerate liquid in approved equipment. Landfill or incinerate contaminated diking material in accordance with local, state and federal regulations.

#### **SECTION 8: SPECIAL PROTECTION INFORMATION**

**Ventilation Type:** Normal room ventilation.

**Respiratory Protection:** None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH- approved or equivalent) suitable for concentrations and types

of air contaminants encountered. **Protective Gloves:** Impervious.

Eve Protection: Chemical splash goggles (ANSI Z-871 or approved equivalent).

Other Protective Equipment: Eyewash facility.

#### **SECTION 9: SPECIAL PRECAUTIONS**

Store away from excessive heat (e.g., steam-pipes, radiators, from sources of ignition, and from reactive materials. Do not store near food or feed.

**Misc Info:** The use of this and auxiliary materials should be confined to designated work areas. Emptied containers may still contain hazardous residues.

#### Note To Physician:

Propellant Contains Methyene Chloride 40-50% Cas 00075-09-2 and Isobutane 30-40% Cas 00075-28-5.

#### Shipping: DOT Classification ORM-D

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DATE PREPARED: 1/01/93 DATE REVISED: 04/23/06

HIMS RATING Heath = 1 Fire = 3 Reactivity = 0 HAZARD RATING: 0 = Insignificant 1 = Non-Toxic, Slight 2 = Moderate 3 = High 4 = Extreme

# MATERIAL SAFETY DATA SHEET COTRONICS EPOXY RESINS

### DURALCO 118 DURALCO 120 DURALCO 122 DURALCO 124 DURALCO 126

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

**SECTION 1: PRODUCT IDENTIFICATION** 

Chemical Name and Synonyms: N/A Mixture

Chemical Formula: N/A

Chemical Family: Proprietary Modified Epoxy Resin

All materials contained within are listed on the TSCA Inventory list

This product is compliant with the RoHS Directive. .

**SECTION 2: COMPOSITION INFORMATION** 

**Material:** Proprietary Modified Epoxy Resin

Nature of Hazard: Irritant

**SECTION 3: PHYSICAL PROPERTY INFORMATION** 

Boiling Point: No Data

Vapor Density (Air=1): >1

Solubility In Water:Negligible% Volatile (By Weight):NegligibleSpecific Gravity (Water=1):1.16Vapor Pressure (mm Hg):No DataMelting Or Freezing Point:No Data

Evaporation Rate (Butyl Acetate=1): < 1

Appearance/Odor: Greyish/Silver and Low Odor

**SECTION 4: FIRE AND EXPLOSION HAZARD DATA** 

Flash Point: > 295°F Auto Ignition Temp: N/A Lower Explosion Limit (%): N/A

Upper Explosion Limit (%): N/A

Extinguishing Media: Foam, CO2, Dry Chemical: Water Spray

**SECTION 5: HEALTH HAZARD DATA** 

**Effects Of Overexposure:** 

**Inhalation:** Mist or vapor can irritate the nose and throat.

Eve Contact: Substantially irritating to eyes.

Skin Contact: Substance is moderately irritating and can cause superficial burns after

prolonged contact. Not absorbed in toxic amounts.

**Ingestion:** Harmful if swallowed.

**Delayed Effects:** Prolonged or repeated exposure can cause allergic reaction.

#### **SECTION 6: EMERGENCY AND FIRST AID PROCEDURES**

**Inhalation:** Move subject to fresh air. Give artificial respiration if breathing has stopped. **Eye And Skin Contact:** Flush eyes with a large amount of water for at least 15 minutes. Get prompt medical attention. Wash skin thoroughly with soap and water.

Remove and wash clothing before reuse.

*Ingestion:* If swallowed dilute by giving 2 glasses of water to drink. See a physician.

Never give anything by mouth to an unconscious person.

#### SECTION 7: REACTIVITY INFORMATION

Stability: Stable

Hazardous Polymerization: Will Not Occur

#### **SECTION 8: SPILL OR LEAK PROCEDURES**

Dike and absorb spill on inert material (sand, earth, etc.). Transfer diking material to containers for disposal. Wear protective clothing. Use breathing apparatus (MSHA/NIOSH approved, pressure-demand, self-contained) or air mask for large spills in confined area. Wash clothing before reuse. Destroy clothing that cannot be decontaminated (i.e. Shoes).

**Waste Disposal Methods:** Incinerate liquid in approved equipment. Landfill or incinerate contaminated diking material in accordance with local, state and federal regulations.

#### **SECTION 9: SPECIAL PROTECTION INFORMATION**

Ventilation Type: Normal room ventilation.

**Respiratory Protection:** None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH approved or equivalent) suitable for concentrations and types of air contaminants encountered.

Protective Gloves: Impervious.

Eye Protection: Chemical splash goggles (ANSI Z-871 or approved equivalent).

Other Protective Equipment: Eyewash facility.

#### **SECTION 10: SPECIAL PRECAUTIONS**

Store away from excessive heat (e.g., steam-pipes, radiators, from sources of ignition, and from reactive materials). Do not store near food or feed.

Corrosive Material: Avoid all eye and skin contact.

Misc Info: The use of this and auxiliary materials should be confined to designated

work areas. Emptied containers may still contain hazardous residues. **Note To Physician:** Allergic dermatitis or respiratory response in susceptible

individuals may be delayed even weeks or months after frequent and/or prolonged contact. Acute effects can include mucosa damage, severe laryngeal edema, and shock associated with corrosive agents. Possible mucosa damage may contraindicate the use of gastric lavage.

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Created 11/01/85

Revised 02/23/06

Page 1 of 2

HIMS RATING Health = 2 Fire = 0 Reactivity = 0 HAZARD RATING: 0 = Insignificant 1 = Non-Toxic, Slight 2 = Moderate 3 = High 4 = Extreme

## **MATERIAL SAFETY DATA SHEET COTRONICS EPOXY**

#### **DURALCO 120**

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

**SECTION 1: PRODUCT IDENTIFICATION** 

Chemical Name and Synonyms: N/A Mixture

Chemical Formula: N/A

Chemical Family: Proprietary Modified Epoxy Resin All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

**SECTION 2: COMPOSITION INFORMATION** 

Chemical Family: CAS#

Part A Resin:

Silver 7440-22-4 70% - 90% Proprietary Modified Epoxy Resin Balance

Part B Hardener:

Proprietary Organic Amine

Note Other non-hazardous components will not be listed separately

**SECTION 3: PHYSICAL PROPERTY INFORMATION** 

**Boiling Point:** No Data Vapor Density (Air=1): >1

Solubility In Water: Negligible % Volatile (By Weight): Negligible

Specific Gravity (Water=1): 3.2 - 3.9 gms/cc

Vapor Pressure (mm Hg): No Data **Melting Or Freezing Point:** No Data Evaporation Rate (Butyl Acetate=1): <1

Appearance/Odor: Grey-Silver viscous liquid/ mild odor

SECTION 4: FIRE AND EXPLOSION HAZARD DATA

> 295°F Flash Point: Auto Ignition Temp: No Data Lower Explosion Limit (%): No Data

Upper Explosion Limit (%): No Data Extinguishing Media: Foam, CO<sub>2</sub>, Dry

Chemical: Water Spray

**SECTION 5: HEALTH HAZARD DATA** 

**Effects Of Overexposure:** 

**Inhalation:** Mist or vapor can irritate the nose and throat.

Eye Contact: Substantially irritating to eyes.

Skin Contact: Substance is moderately irritating and can cause superficial burns after

prolonged contact. Not absorbed in toxic amounts.

Ingestion: Harmful if swallowed.

**Delayed Effects:** Prolonged or repeated exposure can cause allergic reaction.

#### SECTION 6: EMERGENCY AND FIRST AID PROCEDURES

*Inhalation:* Move subject to fresh air. Give artificial respiration if breathing has stopped. Eye and Skin Contact: Flush eyes with a large amount of water for at least 15 minutes. Get prompt medical attention. Wash skin thoroughly with soap and water. Remove and wash clothing before reuse.

*Ingestion:* If swallowed dilute by giving 2 glasses of water to drink. See a physician.

Never give anything by mouth to an unconscious person.

#### SECTION 7: REACTIVITY INFORMATION

Stability: Stable

Hazardous Polvmerization: Will Not Occur

Materials to Avoid: Strong Oxidizing and Reducing agents

#### **SECTION 8: SPILL OR LEAK PROCEDURES**

Dike and absorb spill on inert material (sand, earth, etc.). Transfer diking material to containers for disposal. Wear protective clothing. Use breathing apparatus (MSHA/NIOSH approved, pressure-demand, self-contained) or air mask for large spills in confined area. Wash clothing before reuse. Destroy clothing that cannot be decontaminated (i.e. Shoes).

Waste Disposal Methods: Incinerate liquid in approved equipment. Landfill or incinerate contaminated diking material in accordance with local, state and federal regulations.

#### **SECTION 9: SPECIAL PROTECTION INFORMATION**

Ventilation Type: Normal room ventilation.

Respiratory Protection: None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH approved or equivalent) suitable for concentrations and types of air contaminants encountered.

Protective Gloves: Impervious.

Eye Protection: Chemical splash goggles (ANSI Z-871 or approved equivalent).

Other Protective Equipment: Eyewash facility.

#### **SECTION 10: SPECIAL PRECAUTIONS**

Store away from excessive heat (e.g., steam-pipes, radiators, from sources of ignition, and from reactive materials). Do not store near food or feed.

Corrosive Material: Avoid all eye and skin contact.

Misc Info: The use of this and auxiliary materials should be confined to designated work areas. Emptied containers may still contain hazardous residues.

Note To Physician: Allergic dermatitis or respiratory response in susceptible

individuals may be delayed even weeks or months after frequent and/or prolonged contact. Acute effects can include mucosa damage, severe larvngeal edema, and shock associated with corrosive agents. Possible mucosa damage may contraindicate the use of gastric lavage.

Note: This product contains the following toxic chemicals subject to the reporting requirements of the Emergency Planning and Community Right to Know Act. Of 1985

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Date Prepared 1/15/95

Date Revised 02/23/06

HIMS RATING Health = 2 Fire = 0 Reactivity = 0

HAZARD RATING: 0 = Insignificant 1 = Non-Toxic, Slight 2 = Moderate 3 = High 4 = Extreme

# MATERIAL SAFETY DATA SHEET COTRONICS EPOXY DURALCO 125

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

**SECTION 1: PRODUCT IDENTIFICATION** 

Chemical Name and Synonyms: N/A Mixture

Chemical Formula: N/A

Chemical Family: Proprietary Modified Epoxy Resin All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

**SECTION 2: COMPOSITION INFORMATION** 

Chemical Family: CAS # %

Part A Resin:

Silver 7440-22-4 60% - 80% Proprietary Modified Epoxy Resin Balance

Part B Hardener:

Silver Flake 7440-22-4 60% - 80% Proprietary Organic Amine Balance

Note Other non-hazardous components will not be listed separately

**SECTION 3: PHYSICAL PROPERTY INFORMATION** 

**Boiling Point:** No Data **Vapor Density (Air=1):** >1

Solubility In Water:

% Volatile (By Weight):

Negligible

Negligible

Specific Gravity (Water=1): 2.5 - 3.5 gms/cc

Vapor Pressure (mm Hg):

Melting Or Freezing Point:

No Data

No Data

Evaporation Rate (Butyl Acetate=1): <1

Appearance/Odor: Grey-Silver viscous liquid/ mild odor

SECTION 4: FIRE AND EXPLOSION HAZARD DATA

*Flash Point:* > 295°F

Auto Ignition Temp:

Lower Explosion Limit (%):

Upper Explosion Limit (%):

Extinguishing Media:

No Data

No Data

No Data

Foam, CO<sub>2</sub>, Dry

Water Spray

**SECTION 5: HEALTH HAZARD DATA** 

**Effects Of Overexposure:** 

**Inhalation:** Mist or vapor can irritate the nose and throat.

Eye Contact: Substantially irritating to eyes.

Skin Contact: Substance is moderately irritating and can cause superficial burns after

prolonged contact. Not absorbed in toxic amounts.

Ingestion: Harmful if swallowed.

**Delayed Effects:** Prolonged or repeated exposure can cause allergic reaction.

#### **SECTION 6: EMERGENCY AND FIRST AID PROCEDURES**

**Inhalation:** Move subject to fresh air. Give artificial respiration if breathing has stopped. **Eye and Skin Contact:** Flush eyes with a large amount of water for at least 15 minutes. Get prompt medical attention. Wash skin thoroughly with soap and water.

Remove and wash clothing before reuse.

*Ingestion:* If swallowed dilute by giving 2 glasses of water to drink. See a physician.

Never give anything by mouth to an unconscious person.

#### **SECTION 7: REACTIVITY INFORMATION**

Stability: Stable

Hazardous Polymerization: Will Not Occur

Materials to Avoid: Strong Oxidizing and Reducing agents

#### **SECTION 8: SPILL OR LEAK PROCEDURES**

Dike and absorb spill on inert material (sand, earth, etc.). Transfer diking material to containers for disposal. Wear protective clothing. Use breathing apparatus (MSHA/NIOSH approved, pressure-demand, self-contained) or air mask for large spills in confined area. Wash clothing before reuse. Destroy clothing that cannot be decontaminated (i.e. Shoes).

**Waste Disposal Methods:** Incinerate liquid in approved equipment. Landfill or incinerate contaminated diking material in accordance with local, state and federal regulations.

#### **SECTION 9: SPECIAL PROTECTION INFORMATION**

Ventilation Type: Normal room ventilation.

**Respiratory Protection:** None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH approved or equivalent) suitable for concentrations and types

of air contaminants encountered. **Protective Gloves:** Impervious.

Eve Protection: Chemical splash goggles (ANSI Z-871 or approved equivalent).

Other Protective Equipment: Eyewash facility.

#### **SECTION 10: SPECIAL PRECAUTIONS**

Store away from excessive heat (e.g., steam-pipes, radiators, from sources of ignition, and from reactive materials). Do not store near food or feed.

Corrosive Material: Avoid all eye and skin contact.

Misc Info: The use of this and auxiliary materials should be confined to designated

work areas. Emptied containers may still contain hazardous residues.

**Note To Physician:** Allergic dermatitis or respiratory response in susceptible individuals may be delayed even weeks or months after frequent and/or prolonged contact. Acute effects can include mucosa damage, severe laryngeal edema, and shock associated with corrosive agents. Possible mucosa damage may contraindicate the use of gastric lavage.

**Note:** This product contains the following toxic chemicals subject to the reporting requirements of the Emergency Planning and Community Right to Know Act. Of 1985 (40 CFR 372)

**Disclaimer:** The information supplied is not to be taken as a warranty or representation for which Cotronics Corp. assumes legal responsibility. It is offered solely for your consideration, investigation and verification. all risk of use, singly or in combination with other products, whether or not in accordance with the instructions, directions, or suggestions is borne by the user.

Date Prepared 1/15/95

Date Revised 02/23/06

HIMS RATING Health = 2 Fire = 0 Reactivity = 0 HAZARD RATING: 0 = Insignificant 1 = Non-Toxic, Slight 2 = Moderate 3 = High 4 = Extreme

# MATERIAL SAFETY DATA SHEET COTRONICS EPOXY RESINS

### **DURALCO 127 Two Component**

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

**SECTION 1: PRODUCT IDENTIFICATION** 

Chemical Name and Synonyms: N/A Mixture

Chemical Formula: N/A

Chemical Family: Proprietary Modified Epoxy Resin All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

**SECTION 2: COMPOSITION INFORMATION** 

Chemical Family: CAS #

Part A Resin:

Epoxy Resin (proprietary novolac) \*

Graphite 7782-42-5 <60

All materials are contained within the are listed on the TSCA inventory list.

**SECTION 3: PHYSICAL PROPERTY INFORMATION** 

**Boiling Point:** No Data

Vapor Density (Air=1): >1

Solubility In Water:Negligible% Volatile (By Weight):NegligibleSpecific Gravity (Water=1):1.4-1.5Vapor Pressure (mm Hg):N/A

Melting Or Freezing Point: N/A Evaporation Rate (Butyl Acetate=1): <1

Appearance/Odor: Grey Viscous liquid

SECTION 4: FIRE AND EXPLOSION HAZARD DATA

Flash Point: >295°F Auto Ignition Temp: N/A

Auto Ignition Temp: N/A
Lower Explosion Limit (%): N/A
Upper Explosion Limit (%): N/A

Extinguishing Media: Foam, CO<sub>2</sub>, Dry Chemical: Water Spray

**SECTION 5: HEALTH HAZARD DATA** 

**Effects Of Overexposure:** 

*Inhalation:* Mist or vapor can irritate the nose and throat.

Eye Contact: Substantially irritating to eyes.

Skin Contact: Substance is moderately irritating and can cause superficial burns after

prolonged contact. Not absorbed in toxic amounts.

Ingestion: Harmful if swallowed.

**Delayed Effects:** Prolonged or repeated exposure can cause allergic reaction.

#### SECTION 6: EMERGENCY AND FIRST AID PROCEDURES

**Inhalation:** Move subject to fresh air. Give artificial respiration if breathing has stopped. **Eye And Skin Contact:** Flush eyes with a large amount of water for at least 15 minutes. Get prompt medical attention. Wash skin thoroughly with soap and water.

Remove and wash clothing before reuse.

Ingestion: If swallowed dilute by giving 2 glasses of water to drink. See a physician.

Never give anything by mouth to an unconscious person.

#### **SECTION 7: REACTIVITY INFORMATION**

Stability: Stable

Hazardous Polymerization: Will Not Occur

#### **SECTION 8: SPILL OR LEAK PROCEDURES**

Dike and absorb spill on inert material (sand, earth, etc.). Transfer diking material to containers for disposal. Wear protective clothing. Use breathing apparatus (MSHA/NIOSH approved, pressure-demand, self-contained) or air mask for large spills in confined area. Wash clothing before reuse. Destroy clothing that cannot be decontaminated (i.e. Shoes).

**Waste Disposal Methods:** Incinerate liquid in approved equipment. Landfill or incinerate contaminated diking material in accordance with local, state and federal regulations.

#### **SECTION 9: SPECIAL PROTECTION INFORMATION**

**Ventilation Type:** Normal room ventilation.

**Respiratory Protection:** None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH approved or equivalent) suitable for concentrations and types of air contaminants encountered.

Protective Gloves: Impervious.

Eye Protection: Chemical splash goggles (ANSI Z-871 or approved equivalent).

Other Protective Equipment: Eyewash facility.

#### **SECTION 10: SPECIAL PRECAUTIONS**

Store away from excessive heat (e.g., steam-pipes, radiators, from sources of ignition, and from reactive materials). Do not store near food or feed.

Corrosive Material: Avoid all eye and skin contact.

*Misc Info:* The use of this and auxiliary materials should be confined to designated work areas. Emptied containers may still contain hazardous residues.

**Note To Physician:** Allergic dermatitis or respiratory response in susceptible individuals may be delayed even weeks or months after frequent and/or prolonged contact. Acute effects can include mucosa damage, severe laryngeal edema, and shock associated with corrosive agents. Possible mucosa damage may contraindicate the use of gastric lavage.

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Date Created 02/20/00

Date Revised 02/23/06

HIMS RATING Health = 2 Fire = 0 Reactivity = 0 HAZARD RATING: 0 = Insignificant 1 = Non-Toxic, Slight 2 = Moderate 3 = High 4 = Extreme

### **MATERIAL SAFETY DATA SHEET COTRONICS EPOXY RESINS**

#### **DURALCO 127-1A ONE COMPONENT**

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

**SECTION 1: PRODUCT IDENTIFICATION** 

Chemical Name and Synonyms: N/A Mixture

Chemical Formula:

Chemical Family: Proprietary Modified Epoxy Resin

All materials contained within are listed on the TSCA Inventory list.

**SECTION 2: COMPOSITION INFORMATION** 

**Chemical Family:** CAS#

Epoxy Resin (proprietary novolac)

7782-42-5

<60

Hardener

Graphite

Dicyandiamide Complex

All materials are contained within the are listed on the TSCA inventory list.

This product is compliant with the RoHS Directive.

SECTION 3: PHYSICAL PROPERTY INFORMATION

**Boiling Point:** No Data

Vapor Density (Air=1): >1

Solubility In Water: Negligible % Volatile (By Weight): Negligible Specific Gravity (Water=1): 1.4-1.5 Vapor Pressure (mm Hg): N/A Meltina Or Freezina Point: N/A

Evaporation Rate (Butyl Acetate=1): <1 Appearance/Odor: Grev Viscous liquid

**SECTION 4: FIRE AND EXPLOSION HAZARD DATA** 

Flash Point: >295°F N/A

Auto Ignition Temp: Lower Explosion Limit (%): N/A Upper Explosion Limit (%): N/A

Extinguishing Media: Foam, CO<sub>2</sub>, Dry Chemical: Water Spray

**SECTION 5: HEALTH HAZARD DATA** 

**Effects Of Overexposure:** 

*Inhalation:* Mist or vapor can irritate the nose and throat.

**Eve Contact:** Substantially irritating to eyes.

Skin Contact: Substance is moderately irritating and can cause superficial burns after

prolonged contact. Not absorbed in toxic amounts.

Ingestion: Harmful if swallowed.

**Delayed Effects:** Prolonged or repeated exposure can cause allergic reaction.

#### **SECTION 6: EMERGENCY AND FIRST AID PROCEDURES**

*Inhalation:* Move subject to fresh air. Give artificial respiration if breathing has stopped. Eve And Skin Contact: Flush eyes with a large amount of water for at least 15 minutes. Get prompt medical attention. Wash skin thoroughly with soap and water.

Remove and wash clothing before reuse.

Ingestion: If swallowed dilute by giving 2 glasses of water to drink. See a physician.

Never give anything by mouth to an unconscious person.

#### SECTION 7: REACTIVITY INFORMATION

Stability: Stable

Hazardous Polymerization: Will Not Occur

#### **SECTION 8: SPILL OR LEAK PROCEDURES**

Dike and absorb spill on inert material (sand, earth, etc.). Transfer diking material to containers for disposal. Wear protective clothing. Use breathing apparatus (MSHA/NIOSH approved, pressure-demand, self-contained) or air mask for large spills in confined area. Wash clothing before reuse. Destroy clothing that cannot be decontaminated (i.e. Shoes).

Waste Disposal Methods: Incinerate liquid in approved equipment. Landfill or incinerate contaminated diking material in accordance with local, state and federal regulations.

#### **SECTION 9: SPECIAL PROTECTION INFORMATION**

**Ventilation Type:** Normal room ventilation.

Respiratory Protection: None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH approved or equivalent) suitable for concentrations and types of air contaminants encountered.

Protective Gloves: Impervious.

Eye Protection: Chemical splash goggles (ANSI Z-871 or approved equivalent).

Other Protective Equipment: Eyewash facility.

#### **SECTION 10: SPECIAL PRECAUTIONS**

Store away from excessive heat (e.g., steam-pipes, radiators, from sources of ignition, and from reactive materials). Do not store near food or feed.

Corrosive Material: Avoid all eve and skin contact.

Misc Info: The use of this and auxiliary materials should be confined to designated

work areas. Emptied containers may still contain hazardous residues.

Note To Physician: Allergic dermatitis or respiratory response in susceptible individuals may be delayed even weeks or months after frequent and/or prolonged contact. Acute effects can include mucosa damage, severe larvngeal edema, and shock associated with corrosive agents. Possible mucosa damage may contraindicate the use of gastric lavage.

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Date Created 02/07/85

Date Revised 02/23/06

HIMS RATING Health = 2 Fire = 0 Reactivity = 0 HAZARD RATING: 0 = Insignificant 1 = Non-Toxic, Slight 2 = Moderate 3 = High 4 = Extreme

# MATERIAL SAFETY DATA SHEET COTRONICS EPOXY HARDENERS

**Duralco 127 Two Component** 

Type One: Room Temperature Curing Systems are Amine Complex.

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

SECTION ONE: PRODUCT IDENTIFICATION

Chemical Name And Synonyms: N/A Mixture\*

Formula: N/A

Chemical Family: Amine Complex

**SECTION 2: COMPOSITION INFORMATION** 

Chemical Family: CAS # %

Part B Hardener:

Graphite 7782-42-5 <50

All materials are contained within the are listed on the TSCA inventory list.

**SECTION 3: PHYSICAL PROPERTY INFORMATION** 

Boiling Point: N/A Vapor Density (Air=1): >1

Solubility In Water:Negligible% Volatile (By Weight):NegligibleMelting Or Freezing Point:N/AVapor Pressure (mm Hg):N/ASpecific Gravity (Water=1):1.25 - 1.30

Evaporation Rate (Butyl Acetate=1): <1

Appearance/Odor: Greyish liquid/Amine odor All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

SECTION 4: FIRE AND EXPLOSION HAZARD DATA

Flash Point: >200°F

Auto Ignition Temp: N/A
Lower Explosion Limit (%): N/A
Upper Explosion Limit (%): N/A

Extinguishing Media: Foam, C02, Dry Chemical: Water Spray

**SECTION 5: HEALTH HAZARD DATA** 

**Effects Of Overexposure:** 

Inhalation: Mist/Vapor can irritate the nose and throat.

**Eve Contact:** Substantially irritating to eyes.

Skin Contact: Substance is moderately irritating and can cause superficial burns after

prolonged contact.

Ingestion: Harmful if swallowed.

**Delayed Effects:** Prolonged or repeated exposure can cause allergic reaction.

DATE PREPARED: 11/01/85 DATE REVISED: 02/23/06

#### **SECTION 6: EMERGENCY AND FIRST AID PROCEDURES**

**Inhalation:** Move subject to fresh air. Give artificial respiration if breathing has stopped. **Eye And Skin Contact:** Flush eyes with a large amount of water for at least 15 minutes. Get prompt medical attention. Wash skin thoroughly with soap and water. Remove and wash clothing before reuse.

*Ingestion:* If swallowed dilute by giving 2 glasses of water to drink. See a physician. Never give anything by mouth to an unconscious person.

#### SECTION 7: REACTIVITY INFORMATION

Stability: Stable

Hazardous Polymerization: Will not occur

#### **SECTION 8: SPILL OR LEAK PROCEDURES**

Dike and absorb spill on inert material (sand, earth, etc.). Transfer diking material to containers for disposal. Wear protective clothing. Use breathing apparatus (MSHA/NIOSH approved, pressure-demand, self-contained) or air mask for large spills in confined area. Wash clothing before reuse. Destroy clothing that cannot be decontaminated (i.e. Shoes).

**Waste Disposal Methods:** Incinerate liquid in approved equipment. Landfill or incinerate contaminated diking material in accordance with local, state and federal regulations.

#### **SECTION 9: SPECIAL PROTECTION INFORMATION**

**Ventilation Type:** Normal room ventilation.

**Respiratory Protection:** None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH approved or equivalent) suitable for concentrations and types of air contaminants encountered.

Protective Gloves: Impervious.

Eve Protection: Chemical splash goggles (ANSI Z-871 or approved equivalent).

Other Protective Equipment: Eyewash facility.

#### **SECTION 10: SPECIAL PRECAUTIONS**

Store away from excessive heat (e.g., steam-pipes, radiators, from sources of ignition, and from reactive materials). Do not store near food or feed. Avoid all eye and skin contact.

*Misc Info:* The use of this and auxiliary materials should be confined to designated work areas. Emptied containers may still contain hazardous residues.

**Note To Physician:** Allergic dermatitis or respiratory response in susceptible individuals may be delayed even weeks or months after frequent and/or prolonged contact. Acute effects can include mucosa damage, severe laryngeal edema, and shock associated with corrosive agents. Possible mucosa damage may contraindicate the use of gastric lavage.

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# MATERIAL SAFETY DATA SHEET COTRONICS EPOXY HARDENERS

### DURALCO 118 DURALCO 120 DURALCO 122 DURALCO 124 DURALCO 126

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

#### **SECTION ONE:**

Chemical Name And Synonyms: N/A Mixture\*

Formula: N/A

**Chemical Family:** 122 - Acid Anhydride Complex

118, 120, 124 - Amine Complex 126 - Dicyandiamide Complex

All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

#### **SECTION 2: PHYSICAL PROPERTY INFORMATION**

Boiling Point: N/A Vapor Density (Air=1): >1

Solubility In Water:Negligible% Volatile (By Weight):NegligibleMelting Or Freezing Point:N/AVapor Pressure (mm Hg):N/ASpecific Gravity (Water=1):0.93 - 1.30

Evaporation Rate (Butyl Acetate=1): <1

Appearance/Odor: Transparent amber liquid/Amine odor

#### SECTION 3: FIRE AND EXPLOSION HAZARD DATA

Flash Point: >200°F
Auto Ignition Temp: N/A
Lower Explosion Limit (%): N/A
Upper Explosion Limit (%): N/A

Extinguishing Media: Foam, C02, Dry Chemical: Water Spray

#### **SECTION 4: HEALTH HAZARD DATA**

**Effects Of Overexposure:** 

Inhalation: Mist/Vapor can irritate the nose and throat.

Eye Contact: Substantially irritating to eyes.

Skin Contact: Substance is moderately irritating and can cause superficial burns after

prolonged contact.

Ingestion: Harmful if swallowed.

**Delayed Effects:** Prolonged or repeated exposure can cause allergic reaction.

#### **SECTION 5: EMERGENCY AND FIRST AID PROCEDURES**

**Inhalation:** Move subject to fresh air. Give artificial respiration if breathing has stopped. **Eye And Skin Contact:** Flush eyes with a large amount of water for at least 15 minutes. Get prompt medical attention. Wash skin thoroughly with soap and water. Remove and wash clothing before reuse.

*Ingestion:* If swallowed dilute by giving 2 glasses of water to drink. See a physician. Never give anything by mouth to an unconscious person.

#### SECTION 6: REACTIVITY INFORMATION

Stability: Stable

Hazardous Polymerization: Will not occur

#### SECTION 7: SPILL OR LEAK PROCEDURES

Dike and absorb spill on inert material (sand, earth, etc.). Transfer diking material to containers for disposal. Wear protective clothing. Use breathing apparatus (MSHA/NIOSH approved, pressure-demand, self-contained) or air mask for large spills in confined area. Wash clothing before reuse. Destroy clothing that cannot be decontaminated (i.e. Shoes).

**Waste Disposal Methods:** Incinerate liquid in approved equipment. Landfill or incinerate contaminated diking material in accordance with local, state and federal regulations.

#### **SECTION 8: SPECIAL PROTECTION INFORMATION**

**Ventilation Type:** Normal room ventilation.

**Respiratory Protection:** None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH approved or equivalent) suitable for concentrations and types of air contaminants encountered.

**Protective Gloves:** Impervious.

Eye Protection: Chemical splash goggles (ANSI Z-871 or approved equivalent).

Other Protective Equipment: Eyewash facility.

#### **SECTION 9: SPECIAL PRECAUTIONS**

Store away from excessive heat (e.g., steam-pipes, radiators, from sources of ignition, and from reactive materials). Do not store near food or feed. Avoid all eye and skin contact.

*Misc Info:* The use of this and auxiliary materials should be confined to designated work areas. Emptied containers may still contain hazardous residues.

**Note To Physician:** Allergic dermatitis or respiratory response in susceptible individuals may be delayed even weeks or months after frequent and/or prolonged contact. Acute effects can include mucosa damage, severe laryngeal edema, and shock associated with corrosive agents. Possible mucosa damage may contraindicate the use of gastric layage.

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DATE PREPARED: 11/01/85 DATE REVISED: 02/23/06

# MATERIAL SAFETY DATA SHEET **COTRONICS CORPORATION**

Replicast 101 Part B

#### SECTION 1 CHEMICAL PRODUCT / COMPANY INFORMATION

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

Product Name: Replicast 101 Part B

Formula: N/A Comments: N/A

Chemical Family: Polyurethane Elastomer

#### **SECTION 2: COMPOSITION INFORMATION**

Wt. % **ACGIH TWA OSHA PEL** Component CAS# Butyl benzyl phthalate 85-68-7 30-35 N/A N/A 30-5003P 30-35 N/A N/A 1332-58-7 15-20 15 mg/m<sup>3</sup> as dust 15 mg/m<sup>3</sup> as dust 14808-60-7 15-20 50 mg/m<sup>3</sup> as dust 50 mg/m<sup>3</sup> as dust 13463-67-7 1-3 15 mg/m<sup>3</sup> as dust 15 mg/m<sup>3</sup> as dust N. Gentlemen. Trade Secret #221290880-5003P Kaolin Silica, Quartz Titanium Dioxide 26545-49-3 0.1 0.1 mg/m<sup>3</sup> as dust 0.1 mg/m<sup>3</sup> as dust Phenylmecuric neodecanoate

All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

#### **SECTION 3: PHYSICAL DATA**

Boiling Point ( $\emptyset F$ ): None (polymeric Resin) Freezing/Melting Point:: None Determined

Specific Gravity Range (H2O=1): 1.40

Vapor Pressure (mm Hg.): None (polymeric resin)

Vapor Density (Air=1): > 1 Viscosity: 90 poise Solubility in Water: Negligible

Evaporation Rate (=1): None (polymeric resin)

Appearance/Odor: White viscous liquid, characteristic odor

% Volatile: Nil

#### SECTION 4: FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used): 300° F (150° C) (COC) Flammability Classification: Non-Flammable

Unusual Fire and Explosive Hazards: None

Extinguishing Media: Water Fog, Dry Chemical, Carbon Dioxide Foam Fire Fighting Instructions: Fire fighters should wear self contained breathing apparatus. Do not release runoff from fire control methods to sewers or waterways. Fire Fighting Equipment: Fire may produce toxic thermal decomposition products, wear self contained breathing apparatus (SCBA) with a face piece operated in pressuredemand or positive-pressure mode.

#### Sara Section 313 Supplier Notification:

This product contains the following chemical (s) subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1968 and of 40 CFR 372: Refer to the Hazardous Ingredients section of this MSDS for the appropriate CAS numbers.

**DATE REVISED: 02/23/06** DATE PREPARED: 01/01/89

HIMS RATING Health = 2 Fire = 0 Reactivity = 1 HAZARD RATING: 0 = Insignificant 1 = Non-Toxic, Slight 2 = Moderate 3 = High 4 = Extreme

#### **SECTION 5: HEALTH HAZARD DATA**

Primary Entry Routes: Dermal.

Target Organs: pancreas, liver, thyroid and eyes.

Acute Effects of

Inhalation: Vapors, which are not significant unless heated or sprayed can cause irritation

to respiratory tract..

**Eye:** May cause irritation, redness, tearing...

**Skin:** Contact will cause irritation, reddening, swelling, moderate dermatitis.

**Ingestion:** May have corrosive effects on the linings of lining of the mouth and stomach:

symptoms may cause sore throat, abdominal pain, nausea, vomiting, and diarrhea

Carcinogenicity: IARC. NTP and OSHA do not list any of these components as a carcinogen.

Medical Conditions Aggravated by Long Term Exposure: Pre-existing skin disorders.

Chronic Effects of Over Exposure: This product contains an organo-mercury catalyst below the reportable level required by OSHA 1910.1200; however, due to the chronic toxicity of organo-mercury compounds careful handling of this product is required.

#### SECTION 6: FIRE. EXPLOSIVE AND REACTIVITY DATA

Stability: Stable at room temperature in closed containers under normal storage and handling conditions.

Polymerization: Hazardous polymerization can not occur

Conditions To Avoid: Avoid contamination with water and other materials that react with amines.

**Chemical Incompatibilities:** Strong acids and oxidizers.

Thermal Decomposition Products: Oxides of nitrogen, carbon monoxide and carbon monoxide.

#### SECTION 7: SPILL OR LEAK PROCEDURES

Spill or Leak Procedures: Dike and contain spill; absorb or scrape up excess into suitable container for disposal. Stop or reduce discharge if it can be done safely. Regulatory Requirements: Follow applicable OSHA regulations (29 CFR 1910.120). Disposal: This material contains a hazardous constituent as identified in RCRA, Title 40 CFR 261, Appendix VIII and must be disposed of in accordance with applicable federal state and local regulations.

#### SECTION 8: SPECIAL PROTECTION INFORMATION

Respiratory Protection (Specify Type): NIOSH approved\*. Respirators recommended for spray applications. Air purifying respirators do not protect workers in oxygen - deficient atmospheres.

Ventilation: Local Exhaust: Vacuuming with the vacuum exhaust passing through a high efficiency particulate arresting (HEPA) filter is the exhaust is discharged into the workplace.

Protective Clothing: chemically protected gloves, boots, aprons, lab coats to prevent prolonged or repeated contact. Wear safety glasses or chemical safety goggles. Eve Protection: Recommended.

#### **SECTION 9: SPECIAL PRECAUTIONS**

Precautions To Be Taken In Handling and Storing: Minimize breathing of vapors and avoid prolonged or repeated contact with skin. Wear proper respiratory equipment. Use good general house keeping procedures.

Storage Requirements: Store in cool well ventilated area.

\*(Reference 1984-85 ACGIH TLV Booklet, Page 34). Appropriate ventilation should be provided and protective equipment should be worn in compliance with OSHA standard currently 29 CFR 1910.134 (NIOSH approved, air purifying, half mask or full face-piece respirator with appropriate filter pad or cartridge(s)).

# PROPRIETARY MATERIAL SAFETY DATA SHEET COTRONICS EPOXY RESIN

**DURALCO 128, 132, 133, 140** 

#### Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

#### SECTION ONE

Chemical Family: Part A Resin:	CAS#	%
Epoxy Resin Aluminum Powder (132, 133, 140)	* 7429-900-5 *	<50% <60%
Proprietary Ceramic Powder (128, 134)  Part B Hardener:		<60%

\*proprietary Novalac Epoxy Resin

Proprietary

All materials contained within are listed on the TSCA Inventory list.

Organic Amine

This product is compliant with the RoHS Directive.

#### **SECTION 2: PHYSICAL PROPERTY INFORMATION**

100%

Appearance:	Odor:
<b>Resin:</b> Viscous silver liquid.	Sweet odor.
Hardener: Amber transparent liquid.	Ammonia odor.
Melting Or Freezing Point:	N/A
Boiling Point:	N/A
Vapor Pressure (mm Hg) :	N/A
Vapor Density (AIR=1):	>1.
Solubility In Water:	Negligible.
% Volatile (By Weight):	Negligible.
Specific Gravity (Water 1):	Resin 1.5-1.8
	Hardener 0.9-1.2 gr./cc

Evaporation Rate (Butyl Acetate=1): <1.

#### **SECTION 3: FIRE AND EXPLOSION HAZARD DATA**

Flash Point:	>295°F.
Auto Ignition Temp.:	N/A
Lower Explosion Limit (%):	N/A
Upper Explosion Limit (%):	N/A

Extinguishing Media: Foam, C02, Dry. Chemical: Water Spray.

#### **SECTION 4: HEALTH HAZARD DATA**

#### **Effects Of Overexposure:**

Inhalation: Mist or vapor can irritate the nose and throat.

**Eye Contact:** Substantially irritating to eyes.

Skin Contact: Substance is moderately irritating and can cause superficial burns after

prolonged contact. Not absorbed in toxic amounts

Ingestion: Harmful if swallowed.

**Delayed Effects:** Prolonged or repeated exposure can cause allergic reaction.

#### **SECTION 5: EMERGENCY AND FIRST AID PROCEDURES**

**Inhalation:** Move subject to fresh air. Give artificial respiration if breathing has stopped. **Eye And Skin Contact:** Flush eyes with a large amount of water for at least 15 minutes. Get prompt medical attention. Wash skin thoroughly with soap and water. Remove and wash clothing before reuse.

*Ingestion:* If swallowed, dilute by giving 2 glasses of water to drink. See a physician. Never give anything by mouth to an unconscious person.

#### SECTION 6: REACTIVITY INFORMATION

Stability: Stable.

Hazardous Polymerization: Will not occur.

#### **SECTION 7: SPILL OR LEAK PROCEDURES**

Dike and absorb spill on inert material (sand, earth, etc.). Transfer diking material to containers for disposal. Wear protective clothing. Use breathing apparatus (MSHA/NIOSH approved, pressure-demand, self-contained) or air mask for large spills in confined area. Wash clothing before reuse. Destroy clothing that cannot be decontaminated (i.e. Shoes).

**Waste Disposal Methods:** Incinerate liquid in approved equipment. Landfill or incinerate contaminated diking material in accordance with local, state and federal regulations.

#### **SECTION 8: SPECIAL PROTECTION INFORMATION**

Ventilation Type: Normal room ventilation.

**Respiratory Protection:** None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH approved or equivalent) suitable for concentrations and types of air contaminants encountered.

Protective Gloves: Impervious.

**Eye Protection**: Chemical splash goggles(ANSI Z-871 or approved equivalent)

Other Protective Equipment: Eyewash facility.

#### **SECTION 9: SPECIAL PRECAUTIONS**

**Storage:** Store away from excessive heat (e.g., steam-pipes, radiators, from sources of ignition, and from reactive materials). Do not store near food or feed.

Corrosive Material: Avoid all eye and skin contact...

*Misc Info:* The use of this and auxiliary materials should be confined to designated work areas. Emptied containers may still contain hazardous residues.

**Note To Physician:** Allergic dermatitis or respiratory response in susceptible individuals may be delayed even weeks or months after frequent and/or prolonged contact. Acute effects can include mucosa damage, severe laryngeal edema, and shock associated with corrosive agents. Possible mucosa damage may contraindicate the use of gastric layage.

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DATE PREPARED: 11/01/85 DATE REVISED: 02/23/06

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# PROPRIETARY MATERIAL SAFETY DATA SHEET COTRONICS EPOXY RESIN

DURALCO 128, 132, 133, 134, 140

#### Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

#### **SECTION ONE**

Chemical Family:	CAS#	%
Part A Resin:		
Epoxy Resin	*	<50%
Aluminum Powder (132, 133, 140)	7429-900-5	<60%
Proprietary Ceramic Powder (128, 134)	*	<60%
Part B Hardener:		

Organic Amine

\*proprietary Novalac Epoxy Resin

Proprietary

All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

#### SECTION 2: PHYSICAL PROPERTY INFORMATION

100%

Appearance:	Odor:
<b>Resin:</b> Viscous silver liquid.	Sweet odor.
Hardener: Amber transparent liquid.	Ammonia odor.
Melting Or Freezing Point:	N/A
Boiling Point:	N/A
Vapor Pressure (mm Hg) :	N/A
Vapor Density (AIR=1):	>1.
Solubility In Water:	Negligible.
% Volatile (By Weight):	Negligible.
Specific Gravity (Water 1):	Resin 1.5-1.8
	Hardener 0.9-1.2 gr./cc

Evaporation Rate (Butyl Acetate=1): <1.

#### **SECTION 3: FIRE AND EXPLOSION HAZARD DATA**

Flash Point:	>295°F.
Auto Ignition Temp.:	N/A
Lower Explosion Limit (%):	N/A
Upper Explosion Limit (%):	N/A

Extinguishing Media: Foam, C02, Dry. Chemical: Water Spray.

#### **SECTION 4: HEALTH HAZARD DATA**

#### **Effects Of Overexposure:**

Inhalation: Mist or vapor can irritate the nose and throat.

**Eye Contact:** Substantially irritating to eyes.

Skin Contact: Substance is moderately irritating and can cause superficial burns after

prolonged contact. Not absorbed in toxic amounts

Ingestion: Harmful if swallowed.

**Delayed Effects:** Prolonged or repeated exposure can cause allergic reaction.

#### **SECTION 5: EMERGENCY AND FIRST AID PROCEDURES**

**Inhalation:** Move subject to fresh air. Give artificial respiration if breathing has stopped. **Eye And Skin Contact:** Flush eyes with a large amount of water for at least 15 minutes. Get prompt medical attention. Wash skin thoroughly with soap and water. Remove and wash clothing before reuse.

*Ingestion:* If swallowed, dilute by giving 2 glasses of water to drink. See a physician. Never give anything by mouth to an unconscious person.

#### **SECTION 6: REACTIVITY INFORMATION**

Stability: Stable.

Hazardous Polymerization: Will not occur.

#### **SECTION 7: SPILL OR LEAK PROCEDURES**

Dike and absorb spill on inert material (sand, earth, etc.). Transfer diking material to containers for disposal. Wear protective clothing. Use breathing apparatus (MSHA/NIOSH approved, pressure-demand, self-contained) or air mask for large spills in confined area. Wash clothing before reuse. Destroy clothing that cannot be decontaminated (i.e. Shoes).

**Waste Disposal Methods:** Incinerate liquid in approved equipment. Landfill or incinerate contaminated diking material in accordance with local, state and federal regulations.

#### **SECTION 8: SPECIAL PROTECTION INFORMATION**

Ventilation Type: Normal room ventilation.

**Respiratory Protection:** None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH approved or equivalent) suitable for concentrations and types of air contaminants encountered.

Protective Gloves: Impervious.

**Eye Protection**: Chemical splash goggles(ANSI Z-871 or approved equivalent)

Other Protective Equipment: Eyewash facility.

#### **SECTION 9: SPECIAL PRECAUTIONS**

**Storage:** Store away from excessive heat (e.g., steam-pipes, radiators, from sources of ignition, and from reactive materials). Do not store near food or feed.

Corrosive Material: Avoid all eye and skin contact...

*Misc Info:* The use of this and auxiliary materials should be confined to designated work areas. Emptied containers may still contain hazardous residues.

**Note To Physician:** Allergic dermatitis or respiratory response in susceptible individuals may be delayed even weeks or months after frequent and/or prolonged contact. Acute effects can include mucosa damage, severe laryngeal edema, and shock associated with corrosive agents. Possible mucosa damage may contraindicate the use of gastric layage.

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DATE PREPARED: 11/01/85 DATE REVISED: 02/23/06

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# PROPRIETARY MATERIAL SAFETY DATA SHEET COTRONICS

Duralco 134 Thermally Conductive Grease
Duralco 134 Al Conductive Grease
Duralco 135 Thermally Conductive Grease

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

Proprietary Thermally Conductive Grease

**SECTION 1: COMPOSITION INFORMATION** 

Component CAS # %

134

Does not contain hazardous materials

134 AL

Aluminum Powder 7429-900-5 60%- 70%

All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

**SECTION 2: PHYSICAL PROPERTY INFORMATION** 

**Appearance:** Viscous silver liquid.

 Melting Or Freezing Point:
 N/A

 Boiling Point:
 N/A

 Vapor Pressure (mm Hg):
 N/A

 Vapor Density (AIR=1):
 >1

Solubility In Water: Negligible

% Volatile (By Weight): <2.0

Specific Gravity (Water 1): 1.6-2.2 gr./cc

Evaporation Rate (Butyl Acetate=1): <1

SECTION 3: FIRE AND EXPLOSION HAZARD DATA

Flash Point: 390° F.
Auto Ignition Temp.: N/A
Lower Explosion Limit (%: N/A
Upper Explosion Limit (%): N/A

Extinguishing Media: Foam, CO<sub>2</sub>, Dry. Chemical: Water Spray.

**SECTION 4: HEALTH HAZARD DATA** 

**Effects Of Overexposure:** 

Inhalation: Mist or vapor can irritate the nose and throat.

Eve Contact: Substantially irritating to eyes.

Skin Contact: Substance is moderately irritating and can cause superficial burns after

prolonged contact. Not absorbed in toxic amounts

Ingestion: Harmful if swallowed.

**Delayed Effects:** Prolonged or repeated exposure can cause allergic reaction.

#### **SECTION 5: EMERGENCY AND FIRST AID PROCEDURES**

**Inhalation:** Move subject to fresh air. Give artificial respiration if breathing has stopped. **Eye And Skin Contact:** Flush eyes with a large amount of water for at least 15 minutes. Get prompt medical attention. Wash skin thoroughly with soap and water. Remove and wash clothing before reuse.

*Ingestion:* If swallowed, dilute by giving 2 glasses of water to drink. See a physician. Never give anything by mouth to an unconscious person.

#### SECTION 6: REACTIVITY INFORMATION

Stability:Stable.Hazardous Polymerization:Will not occur.Hazardous Products of CombustionCO, CO2

#### **SECTION 7: SPILL OR LEAK PROCEDURES**

Dike and absorb spill on inert material (sand, earth, etc.). Transfer diking material to containers for disposal. Wear protective clothing. Use breathing apparatus (MSHA/NIOSH approved, pressure-demand, self-contained) or air mask for large spills in confined area. Wash clothing before reuse. Destroy clothing that cannot be decontaminated (i.e. Shoes).

**Waste Disposal Methods:** Incinerate liquid in approved equipment. Landfill or incinerate contaminated diking material in accordance with local, state and federal regulations.

#### **SECTION 8: SPECIAL PROTECTION INFORMATION**

**Ventilation Type:** Normal room ventilation.

**Respiratory Protection:** None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH approved or equivalent) suitable for concentrations and types of air contaminants encountered.

Protective Gloves: Impervious.

**Eye Protection**: Chemical splash goggles(ANSI Z-871 or approved equivalent)

Other Protective Equipment: Eyewash facility.

#### **SECTION 9: SPECIAL PRECAUTIONS**

**Storage:** Store away from excessive heat (e.g., steam-pipes, radiators, from sources of ignition, and from reactive materials). Do not store near food or feed.

Corrosive Material: Avoid all eye and skin contact.

Misc Info: The use of this and auxiliary materials should be confined to designated

work areas. Emptied containers may still contain hazardous residues.

**Note To Physician:** Allergic dermatitis or respiratory response in susceptible individuals may be delayed even weeks or months after frequent and/or prolonged contact. Acute effects can include mucosa damage, severe laryngeal edema, and shock associated with corrosive agents. Possible mucosa damage may contraindicate the use of gastric lavage.

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## PRELIMINARY MATERIAL SAFETY DATA SHEET

#### **Duralco Protective Paints**

**Liquid Aluminizing** 

201

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

**SECTION 1:PRODUCT IDENTIFICATION** 

Chemical Name and Synonyms: N/A mixture

Formula: N/A Chemical Family: N/A Comments: N/A

**SECTION 2: COMPOSITION INFORMATION** 

INGREDIENT CAS # WT% ACGIH-TWA OSHA-PEL EH40 313

Ceramic Binder 1344-09-08 40-50% N/A N/A N/A ves 15 mg/m<sup>3</sup> 10 mg/m<sup>3</sup> OES 10 mg/m<sup>3</sup> Aluminum Powder 7429-90-5 40-50% Yes Water 7732-18-5 5-15% N/A N/A N/A No

All materials in this product are listed on the TSCA inventory list.

This product is compliant with the RoHS Directive.

**SECTION 3: PHYSICAL DATA** 

Boiling Point (°F): 212°F
Specific Gravity Range (H2O=1): 1.6-2.0
Vapor Pressure (mm Hg.): 4.3
Vapor Density (Air=1): N/A
Percent Volatile by Weight (%): 25-35
Solubility in Water: Soluble

Evaporation Rate ( =1) :

Appearance and Odor: After mixing thick grey liquid, slight odor

**SECTION 4: FIRE AND EXPLOSION HAZARD DATA** 

Extinguishing Media: Carbon Dioxide, Sand, Dry Chemical

Flash Point (Method Used): N/A
Flammable Limit: N/A
Unusual Fire and Explosive Hazards N/A

**Special Fire Fighting Procedures**Coating contains aluminum metal powder

do not use water based extinguishing

agents.

Upper /Lower Explosion Limits N/A

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#### **SECTION 5: HEALTH HAZARD DATA**

**Effects Of Overexposure:** Slight dermatological irritation after prolonged skin contact. *Emergency And First Aid Procedures:* Flush eyes and skin with copious quantities of water. Get immediate medical attention for eyes. If swallowed, consult physician immediately.

#### **SECTION 6: FIRE, EXPLOSIVE AND REACTIVITY DATA**

Stability: Stable

Incompatibility (Materials to Avoid): Aluminum metal powder.

Hazardous Decomposition Products: None.

Hazardous Polymerization: Will Not Occur.

#### **SECTION 7: SPILL OR LEAK PROCEDURES**

**Steps To Be Taken In Case Material Is Released Or Spilled:** Sweep up spilled powder and dispose in approved industrial waste container. Hose spilled wet cement paste with water, immediately. Cement is not water soluble after setting up. Note Liquid is mild acid.

Waste Disposal Method: Approved industrial waste disposal means.

#### **SECTION 8: SPECIAL PROTECTION INFORMATION**

**Respiratory Protection (Specify Type):** NIOSH approved\* Respirators recommended for spray applications.

**Ventilation:** Local Exhaust: Vacuuming with the vacuum exhaust passing through a high efficiency particulate arresting (HEPA) filter is the exhaust is discharged into the workplace.

**Protective Gloves:** Recommended **Eve Protection:** Recommended

Other Protective Equipment: Rubber aprons, lab coats, etc. to protect clothing.

#### **SECTION 9: SPECIAL PRECAUTIONS**

**Precautions To Be Taken In Handling And Storing:** Keep container closed and avoid getting wet until ready to use.

Other Precautions: Wash Hands Thoroughly Before Eating Or Smoking. Avoid Getting Powder In Body Openings, Including Cuts, Sores, Mouth, Etc.

\*(Reference 1984-85 ACGIH TLV Booklet, Page 34). Appropriate ventilation should be provided and protective equipment should be worn in compliance with OSHA standard currently 29 CFR 1910.134 (NIOSH approved, air purifying, half mask or full face-piece respirator with appropriate filter pad or cartridge(s)).

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DATE PREPARED: 3/20/06 DATE REVISED: rev 0

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## MATERIAL SAFETY DATA SHEET

# Cotronics Ceramic Coating Duralco 215

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

**SECTION 1: PRODUCT IDENTIFICATION** 

Chemical Name And Synonyms: N/A Mixture Chemical Family: Alumina Chemical Formula: N/A

Refractory Ceramic Composition (See Type Above)
Proprietary Silicate or Alumina Colloid Bond

All materials contained within are listed on the TSCA inventory list

This product is compliant with the RoHS Directive. .

#### **SECTION 2: COMPOSITION INFORMATION**

As Manufactured	WT. %	TVL/PEL
A. Refractory Ceramic Powder	35 - 60	5 mg/ Cu M
Refractory Ceramic Colloid	10 - 20	5 mg/ Cu M
Water	Balance	ū

B. After Normal Use See Section 8

All materials contained within are listed on the TSCA Inventory list.

#### **SECTION 3: PHYSICAL DATA**

	As Supplied	Cured
Boiling Point (°F) :	212	N/A
Vapor Density (Air=1):	>1	N/A
Specific Gravity Range (H2O=1):	1.5 - 3.0	1.2 - 2.5
Percent Volatile by Volume:	20 - 50	N/A
(%) Solubility in Water:	Soluble	Insoluble
Evaporation Rate (H2O=1):	1	N/A
Appearance/Odor:	Creamy Paste/No Odor	Solid
Vapor Pressure (mm Hg.) :	0.2 - 1.2	N/A

#### **SECTION 4: FIRE AND EXPLOSION HAZARD DATA**

Extinguishing Media: N/A
Flash Point (Method Used): N/A
Flammable Limit: N/A
Unusual Fire And Explosive Hazards: N/A
Special Fire Fighting Procedures: N/A

Upper / Lower explosion limits: N/A

#### DATE PREPARED: 11/01/85 DATE REVISED: 02/23/06

#### SECTION 5: HEALTH HAZARD DATA

**Effects Of Overexposure:** Slight dermatological irritation after prolonged skin contact. **Emergency And First Aid Procedures:** Flush eyes and skin with copious/quantities of water. Get immediate medical attention for eyes. If swallowed, consult physician immediately.

#### **SECTION 6: FIRE, EXPLOSIVE AND REACTIVITY DATA**

Stability: Stable

Incompatibility (Materials to Avoid): Powdered aluminum metal

Hazardous Decomposition Products: None

Hazardous Polymerization: Will Not Occur

#### **SECTION 7: SPILL OR LEAK PROCEDURES**

**Steps To Be Taken In Case Material Is Released Or Spilled:** Sweep up and dispose in approved industrial waste container. Hose spilled wet cement paste with water, immediately. Cement is not water soluble after setting up. Note Liquid is mild alkaline. **Waste Disposal Method:** Approved industrial waste disposal means.

#### **SECTION 8: SPECIAL PROTECTION INFORMATION**

**Respiratory Protection (Specify Type):** NIOSH approved\* Respirators recommended for spray applications.

**Ventilation:** Local Exhaust: Vacuuming with the vacuum exhaust passing through a high efficiency particulate arresting (HEPA) filter is the exhaust is discharged into the workplace.

**Protective Gloves:** Recommended. **Eye Protection:** Recommended.

Other Protective Equipment: Rubber aprons, lab coats, etc. to protect clothing.

#### **SECTION 9: SPECIAL PRECAUTIONS**

**Precautions to be taken in Handling and Storing:** Keep container closed until ready to use.

Other Precautions: Wash hands thoroughly before eating or smoking. Avoid getting in body openings, including cuts, sores, mouth, etc.

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<sup>\*(</sup>Reference 1984-85 ACGIH TLV Booklet, Page 34). Appropriate ventilation should be provided and protective equipment should be worn in compliance with OSHA standard currently 29 CFR 1910.134 (NIOSH approved, air purifying, half mask or full face-piece respirator with appropriate filter pad or cartridge(s)).

### **MATERIAL SAFETY DATA SHEET**

#### COTRONICS PROTECTIVE PAINTS

#### 230 230N STAINLESS PAINT

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

**SECTION 1: PRODUCT IDENTIFICATION** 

Chemical Name And Synonyms: N/A Mixture

Formula: N/A

Chemical Family: Proprietary Stainless Composition, Proprietary

Silicate, Alumina, Bond

Comments: N/A

**SECTION 2: COMPOSITION INFORMATION** 

WT. %: TVL/PEL:

316 Stainless Steel (Alloy) Fe 7439-89-6 90 -100 (total

Mo 7439-98-7 alloy content)

Ch 7440-47-3

Ni 7440-02-0 5-10% 1 mg/cu m

N/A

Proprietary Silicate, Alumina, Bond 90-95% (Binder)

All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

**SECTION 3: PHYSICAL DATA** 

Boiling Point (°F): N/A
Specific Gravity Range (H2O = 1): 0.9 - 3.1
Vapor Pressure (mm Hg.): N/A
Vapor Density (Air=1): N/A
Percent Volatile by Volume (%): N/A
Solubility in Water: N/A
Insoluble

Evaporation Rate (H2O=1): N/A

**Appearance:** Coarse Aggregate with Fine Powdered Matrix.

*Odor:* No Odor.

SECTION 4: FIRE AND EXPLOSION HAZARD DATA

Extinguishing Media: N/A
Flash Point (Method Used): N/A

Flammable Limit: N/A

Unusual Fire and Explosive Hazards: LEL N/A, UEL N/A

Special Fire Fighting Procedures: N/A

**SECTION 5: HEALTH HAZARD DATA** 

**Nickel or Chromium** LD50: **Oral Rat** > 5000 mg/kg. IARC found there was inadequate evidence that metallic nickel **or Chromium** is carcinogenic to humans but since there was sufficient evidence that is carcinogenic to animals, IARC concluded that these metallics are possibly carcinogenic to humans. Epidemiological studies of workers exposed to nickel powder and to dust and fumes generated in the production of nickel alloys and of stainless steel have not indicated the presence of a significant respiratory cancer hazard.

**Effects Of Overexposure:** *Skin Contact:* Repeated contact with metallic nickel can cause nickel sensitivity and allergic skin rashes.

**Emergency And First Aid Procedures:** Flush eyes and skin with copious quantities of water. Get immediate medical attention for eyes. If swallowed, consult physician immediately.

Threshold Limit Value: None *Effects of Overexposure:* 

Slight dermatological irritation after prolonged skin contact.

Emergency and First Aid Procedures:

Flush eyes and skin with copious quantities of water. Get immediate medical attention

for eyes. If swallowed, consult physician immediately.

**SECTION 6: FIRE, EXPLOSIVE AND REACTIVITY DATA** 

Stability: Stable

Incompatibility (Materials to Avoid): Powdered Aluminum Metal.

Hazardous Decomposition Products: None.

Hazardous Polymerization: Will Not Occur.

**SECTION 7: SPILL OR LEAK PROCEDURES** 

Steps to be Taken in Case Material is Released or Spilled:

Sweep up spilled powder and dispose in approved industrial waste container.

Hose spilled neat cement paste with water, immediately. Cement is not water soluble after setting up.

Waste Disposal Method: Approved industrial waste disposal means.

**SECTION 8: SPECIAL PROTECTION INFORMATION** 

**Respiratory Protection (Specify Type):** Respirators recommended for spraying applications.

Ventilation: Local Exhaust
Mechanical (General): Dust
Protective Gloves: Recommended
Eye Protection: Recommended

Other Protective Equipment: Rubber aprons, lab coats, etc. to protect clothing.

**SECTION 9: SPECIAL PRECAUTIONS** 

**Precautions To Be Taken In Handling And Storing:** Keep container closed and avoid getting wet until ready to use.

Other Precautions: Wash Hands Thoroughly Before Eating Or Smoking. Avoid Getting Powder In Body Openings, Including Cuts, Sores, Mouth, Etc.

\*(Reference 1984-85 ACGIH TLV Booklet, Page 34). Appropriate ventilation should be provided and protective equipment should be worn in compliance with OSHA standard currently 29 CFR 1910.134 (NIOSH approved, air purifying, half mask or full face-piece respirator with appropriate filter pad or cartridge(s)).

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DATE PREPARED: 1/01/89 DATE REVISED: 02/23/06

HIMS RATING Health = 1 Fire = 0 Reactivity = 0 HAZARD RATING: 0 = Insignificant 1 = Non-Toxic, Slight 2 = Moderate 3 = High 4 = Extreme

# MATERIAL SAFETY DATA SHEET COTRONICS PROTECTIVE PAINTS

#### 230 THINNER FOR 230 STAINLESS PAINT

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

**SECTION 1: PRODUCT IDENTIFICATION** 

Chemical Name And Synonyms: N/A Mixture

Formula: N/A

Chemical Family: Proprietary Silicate, Alumina Bond

Comments: N/A

**SECTION 2: COMPOSITION INFORMATION** 

MaterialCAS #%Modified Silicate1344-09-835%-50

Modified Silicate 1344-09-8 35%-50%

Other non-hazardous materials are proprietary and will not be listed separately

**Nature of Hazard:** Irritant After Normal Use, See Section 8 \*(1984-85 ACGIH TLV Booklet, Page 50)

All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

**SECTION 3: PHYSICAL DATA** 

Boiling Point (°F): 212°F
Specific Gravity Range (H2O = 1): 0.9 - 1.3
Vapor Pressure (mm Hg.): N/A
Vapor Density (Air=1): N/A
Percent Volatile by Volume (%): N/A

Solubility in Water: soluble Evaporation Rate (H2O=1): 1
Appearance: Liquid

Odor: Liquid No Odor.

**SECTION 4: FIRE AND EXPLOSION HAZARD DATA** 

Extinguishing Media: N/A Flash Point (Method Used): N/A

Flammable Limit: N/A

Unusual Fire and Explosive Hazards:

Lower Explosion Limits N/A
Upper Explosion Limits N/A

Special Fire Fighting Procedures: N/A

**SECTION 5: HEALTH HAZARD DATA** 

Threshold Limit Value: None

value: None

#### **SECTION 5: HEALTH HAZARD DATA CONTINUED**

#### Effects of Overexposure:

Slight dermatological irritation after prolonged skin contact.

#### Emergency and First Aid Procedures:

Flush eyes and skin with copious quantities of water. Get immediate medical attention for eyes. If swallowed, consult physician immediately.

#### **SECTION 6: FIRE, EXPLOSIVE AND REACTIVITY DATA**

Stability: Stable

Incompatibility (Materials to Avoid): Powdered Aluminum Metal.

Hazardous Decomposition Products: None.

Hazardous Polymerization: Will Not Occur.

#### **SECTION 7: SPILL OR LEAK PROCEDURES**

Steps to be Taken in Case Material is Released or Spilled:

Hose spilled liquid with water, immediately.

Waste Disposal Method: Approved industrial waste disposal means.

#### **SECTION 8: SPECIAL PROTECTION INFORMATION**

Respiratory Protection (Specify Type): Respirators recommended for spraying

applications.

Ventilation: Local Exhaust

**Protective Gloves:** Recommended **Eye Protection:** Recommended

Other Protective Equipment: Rubber aprons, lab coats, etc. to protect clothing.

#### **SECTION 9: SPECIAL PRECAUTIONS**

Precautions To Be Taken In Handling And Storing: Keep container closed and avoid getting wet until ready to use.

Other Precautions: Wash Hands Thoroughly Before Eating Or Smoking. Avoid Getting Powder In Body Openings, Including Cuts, Sores, Mouth, Etc.

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DATE PREPARED: 1/01/89 DATE REVISED: 02/23/06

HIMS RATING Health = 1 Fire = 0 Reactivity = 0 HAZARD RATING: 0 = Insignificant 1 = Non-Toxic, Slight 2 = Moderate 3 = High 4 = Extreme

<sup>\*(</sup>Reference 1984-85 ACGIH TLV Booklet, Page 34). Appropriate ventilation should be provided and protective equipment should be worn in compliance with OSHA standard currently 29 CFR 1910.134 (NIOSH approved, air purifying, half mask or full face-piece respirator with appropriate filter pad or cartridge(s)).

### **MATERIAL SAFETY DATA SHEET** COTRONICS

#### **DURALCO PROTECTIVE PAINTS 250 SILICON CARBIDE**

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

#### **SECTION ONE**

N/A Mixture Chemical Name And Synonyms:

Formula: N/A Comments: N/A

Chemical Family:

Part A and Part B Powder:

Refractory Ceramic, Composition Ceramic Oxide, Carbide and Nitride.

Part C Liquid: Proprietary Silicate, Alumina, Bond

#### SECTION 2: COMPOSITION INFORMATION

Α.	As Manufactured	WT. %	TVL/PEL
Part A & B:	Respirable Nuisance Dust	100	5 mg/cu m
Part C:	Liquid Binder	100	· ·
<b>*</b> (1984-85)			

#### B. After Normal Use See Section 8

All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

#### **SECTION 3: PHYSICAL DATA**

	As Mixed	Cured
Boiling Point (°F) :	212	N/A
Vapor Density (Air = 1):	>1	N/A
Specific Gravity Range (H2O = 1):	1	0.5 - 0.8
Percent Volatile by Volume:	30-50	N/A
(%) Solubility in Water:	Soluble	Insoluble
Evaporation Rate (H2O = 1):	1	N/A
Appearance and Odor:	Black Liquid Paint	No Odor. Solid
Vapor Pressure (mm Hg.) :	0.2 - 1.2	N/A

#### **SECTION 4: FIRE AND EXPLOSION HAZARD DATA**

Extinguishing Media: Flash Point (Method Used): Flammable Limit: N/A N/A

Unusual Fire And Explosive Hazards: Special Fire Fighting Procedures:

Lel Uel

#### **SECTION 5: HEALTH HAZARD DATA**

Threshold Limit Value: None Effects Of Overexposure:

Slight dermatological irritation after prolonged skin contact.

Emergency And First Aid Procedures:

Flush eyes and skin with copious quantities of water. Get immediate medical attention for eyes. If swallowed, consult physician immediately.

### SECTION 6: FIRE, EXPLOSIVE AND REACTIVITY DATA

Stability: Stable.

Incompatibility (Materials to Avoid): Powdered aluminum metal.

Hazardous Decomposition Products: None.

**Hazardous Polymerization:** Will Not Occur.

#### **SECTION 7: SPILL OR LEAK PROCEDURES**

#### Steps To Be Taken In Case Material Is Released Or Spilled:

Sweep up spilled powder and dispose in approved industrial waste container. Hose spilled neat cement paste with water immediately. Cement is not water soluble after setting up.

Waste Disposal Method: Approved industrial waste disposal means.

#### SECTION 8: SPECIAL PROTECTION INFORMATION

Respiratory Protection (Specify Type): Respirators recommended for spraying applications.

Ventilation: Local Exhaust. Mechanical (General): Dust. Protective Gloves: Recommended. Eve Protection: Recommended.

Other Protective Equipment: Rubber aprons, lab coats, etc. to protect clothing.

#### **SECTION 9: SPECIAL PRECAUTIONS**

Precautions To Be Taken In Handling And Storing: Keep container closed and avoid getting wet until ready to use.

Other Precautions: Wash Hands Thoroughly Before Eating Or Smoking. Avoid Getting Powder In Body Openings, Including Cuts, Sores, Mouth, Etc.

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#### DATE PREPARED 11/01/85 DATE REVISED 02/23/06

<sup>\*(</sup>Reference 1984-85 ACGIH TLV Booklet, Page 34). Appropriate ventilation should be provided and protective equipment should be worn in compliance with OSHA standard currently 29 CFR 1910.134 (NIOSH approved, air purifying, half mask or full face-piece respirator with appropriate filter pad or cartridge(s)).

# MATERIAL SAFETY DATA SHEET COTRONICS DURASEAL 252

**Manufactures Name: COTRONICS CORPORATION** 

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

**SECTION ONE** 

Chemical Name and Synonyms: Alkyl Silicone Resin

Chemical Formula: N/A
Chemical Family: Silicone
Comments: N/A

**SECTION 2: COMPOSITION INFORMATION** 

A. Hazardous Materials

Alpha-Isotridecyl-Omega-Hydroxy-Polyglycolether 0.5% - 2.5 %

CAS Registry No.: 9043-30-5

Toluene (trace amount) 0.005%-0.5%

CAS Registry No108-88-3

All materials contained within are listed on the TSCA Inventory list.

This material is non hazardous under OSHA criteria

There are no carcinogenic ingredients present at or over 0.1% in this material This material contains between 0.005 and .05% of toluene identified as being a developmental reproductive toxin based on animal studies

This product is compliant with the RoHS Directive.

SECTION 3: PHYSICAL PROPERTY INFORMATION

Appearance: White Liquid Odor: Odorless

Melting or Freezing Point: -1°C, 30°F Boiling Point: -10°C, 212°F

Vapor Pressure: 17.25 mm Hg at 20°C (68°F)

Solubility In Water (20°F): Completely Miscible Density: 1.04 - 1.2 g/cm<sup>3</sup>

pH Value 4-6

SECTION 4: FIRE AND EXPLOSION HAZARD DATA

Flash Point:

Boiling Point:

Autoignition Temp.

Lower Explosion Limit (%):

Upper Explosion Limit(%):

N/A.

N/A.

**Extinguishing Media:** All Standard Firefighting Media.

Special Firefighting Procedures: NA

Material does not burn and does not present any unusual fire or explosion hazards.

**SECTION 5: HEALTH HAZARD DATA** 

**Effects of Overexposure:** *Inhalation:* Excessive inhalation causes headaches, dizziness, nausea and in coordination. Harmful if inhaled. *Eye Contact:* May cause eye irritation. *Skin Contact:* May cause skin irritation. *Ingestion:* Harmful if swallowed. Causes vomiting, nausea, and diarrhea.

No toxic effects are expected and no known physical hazards.

Chronic Effects of Over Exposure: None Expected.

**Emergency and First Aid Procedures:** 

**Ingestion:** If swallowed, do not induce vomiting. Give large quantities of water to drink and get medical attention. Never give anything by mouth to an unconscious person. **Skin:** Remove contaminated clothing and launder before reuse. Wash with soap and

water. Get medical attention if irritation persists.

*Inhalation:* If inhaled, remove to fresh air, if not breathing give artificial respiration, preferably mouth-to-mouth. If breathing is difficult give oxygen. Get Medical attention. *Eyes:* In case of contact, immediately flush eyes with plenty of water for at least 15

minutes and get Medical attention.

**SECTION 6: REACTIVITY INFORMATION** 

Stability: Stable

Hazardous Polymerization: Will not occur.

**Hazardous Decomposition Products:** If stored and handled according to standard industrial practice none known. For the silicone content of the substance measurements have shown the formation of small amounts of formaldehyde at temperatures above 150°F through oxidation.

Incompatibility (Materials to avoid): None Known.

#### **SECTION 7: SPILL OR LEAK PROCEDURES**

Do not introduce into waters, sewage water or soil. Dam in any fluid that runs out using suitable material (earth). Spills of material that reaches waters must be reported to United States coast Guard National Response Centers toll free number 800 424 8802 Wear protective clothing.

Waste Disposal Methods: Incinerate liquid in approved equipment. Incinerate contaminated diking material in accordance with local, state and federal regulations. If small amounts absorb with a liquid binding material If large amount pump into suitable containers. Clean any slippery coating that remains using a cold cleaner (petroleum naphtha or a water/surefactant mix)

#### SECTION 8: SPECIAL PROTECTION INFORMATION

**Ventilation Type:** Normal room ventilation.

**Respiratory Protection:** None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH-approved or equivalent) suitable for concentrations and types of air contaminants encountered.

Protective Gloves: Impervious

**Eye Protection:** Chemical splash goggles(ANSI Z-871 or approved equivalent)

Other Protective Equipment: Evewash facility.

#### **SECTION 9: SPECIAL PRECAUTIONS**

Keep container tightly closed Protect against sun. Minimum temp allowed during storage and transportation 0°C 32°F.

**Note To Physician:** Allergic dermatitis or respiratory response in susceptible individuals may be delayed even weeks or months after frequent and/or prolonged contact. Acute effects can include mucosa damage, severe laryngeal edema, and shock associated with corrosive agents. Possible mucosa damage may contraindicate the use of gastric lavage.

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DATE PREPARED 12/20/89 REVISED 02/23/06

Page 1 of 2

HIMS RATING Health = 1 Fire = 0 Reactivity = 0 HAZARD RATING: 0 = Insignificant 1 = Non-Toxic, Slight 2 = Moderate 3 = High 4 = Extreme

### MATERIAL SAFETY DATA SHEET COTRONICS **DURALCO 254**

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

#### SECTION ONE

Chemical Name and Synonyms: Alkyl Silicone Resin

N/A Chemical Formula: **Chemical Family:** Silicone Comments: N/A

**SECTION 2: COMPOSITION INFORMATION** 

#### A. Hazardous Materials

Alpha-Isotridecyl-Omega-Hydroxy-Polyglycolether 0.5% - 2.5 %

CAS Registry No.: 9043-30-5

Toluene (trace amount) CAS No108-88-3 0.005%-0.5% Nickel CAS No 7440-02-0 5-10%

All materials contained within are listed on the TSCA Inventory list.

This material is non hazardous under OSHA criteria

There are no carcinogenic ingredients present at or over 0.1% in this material This material contains between 0.005 and .05% of toluene identified as being a developmental reproductive toxin based on

This product is compliant with the RoHS Directive.

#### **SECTION 3: PHYSICAL PROPERTY INFORMATION**

Appearance: White Liquid Odor: Odorless Melting or Freezing Point: -1°C. 30°F

**Boiling Point:** 100°C, 212°F Vapor Pressure: 17.25 mm Hg at 20°C (68°F)

Solubility In Water (20°F): Completely Miscible 1.04 - 1.5 g/cm<sup>3</sup> Density:

pH Value

#### SECTION 4: FIRE AND EXPLOSION HAZARD DATA

Flash Point: **Boiling Point:** 100°C Autoignition Temp. 455°C Lower Explosion Limit (%): N/A. Upper Explosion Limit(%):

Extinguishing Media: All Standard Firefighting Media.

Special Firefighting Procedures: NA

Material does not burn and does not present any unusual fire or explosion hazards.

#### **SECTION 5: HEALTH HAZARD DATA**

Effects of Overexposure: Inhalation: Excessive inhalation causes headaches, dizziness. nausea and in coordination. Harmful if inhaled. Eye Contact: May cause eye irritation. Skin Contact: May cause skin irritation. Ingestion: Harmful if swallowed. Causes vomiting, nausea, and diarrhea.

No toxic effects are expected and no known physical hazards.

Chronic Effects of Over Exposure: None Expected.

**Emergency and First Aid Procedures:** 

Ingestion: If swallowed, do not induce vomiting. Give large quantities of water to drink and get medical attention. Never give anything by mouth to an unconscious person. Skin: Remove contaminated clothing and launder before reuse. Wash with soap and water. Get medical attention if irritation persists. Page 1 of 2

*Inhalation:* If inhaled, remove to fresh air, if not breathing give artificial respiration, preferably mouth-to-mouth. If breathing is difficult give oxygen. Get Medical attention. Eyes: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get Medical attention.

#### Nickel: LD50: Oral Rat > 5000 mg/kg.

IARC found there was inadequate evidence that metallic nickel is carcinogenic to humans but since there was sufficient evidence that is carcinogenic to animals, IARC concluded that metallic nickel is possibly carcinogenic to humans. Epidemiological studies of workers exposed to nickel powder and to dust and fumes generated in the production of nickel alloys and of stainless steel have not indicated the presence of a significant respiratory cancer hazard.

Effects Of Overexposure: Skin Contact: Repeated contact with metallic nickel can cause nickel sensitivity and allergic skin rashes.

Emergency And First Aid Procedures: Flush eyes and skin with copious quantities of water. Get immediate medical attention for eyes. If swallowed, consult physician immediately.

#### **SECTION 6: REACTIVITY INFORMATION**

Stability: Stable

Hazardous Polymerization: Will not occur.

Hazardous Decomposition Products: If stored and handled according to standard industrial practice none known. For the silicone content of the substance measurements have shown the formation of small amounts of formaldehyde at temperatures above 150°F through oxidation.

Incompatibility (Materials to avoid): None Known.

#### **SECTION 7: SPILL OR LEAK PROCEDURES**

Do not introduce into waters, sewage water or soil. Dam in any fluid that runs out using suitable material (earth). Spills of material that reaches waters must be reported to United States coast Guard National Response Centers toll free number 800 424 8802 Wear protective clothing.

Waste Disposal Methods: Incinerate liquid in approved equipment. Incinerate contaminated diking material in accordance with local, state and federal regulations. If small amounts absorb with a liquid binding material If large amount pump into suitable containers. Clean any slippery coating that remains using a cold cleaner (petroleum naphtha or a water/surefactant mix)

#### **SECTION 8: SPECIAL PROTECTION INFORMATION**

**Ventilation Type:** Normal room ventilation.

Respiratory Protection: None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH-approved or equivalent ) suitable for concentrations and types of air contaminants encountered.

Protective Gloves: Impervious

Eve Protection: Chemical splash goggles(ANSI Z-871 or approved equivalent)

Other Protective Equipment: Eyewash facility.

#### **SECTION 9: SPECIAL PRECAUTIONS**

Keep container tightly closed Protect against sun. Minimum temp allowed during storage and transportation 0°C 32°F.

Note To Physician: Allergic dermatitis or respiratory response in susceptible individuals may be delayed even weeks or months after frequent and/or prolonged contact. Acute effects can include mucosa damage, severe laryngeal edema, and shock associated with corrosive agents. Possible mucosa damage may contraindicate the use of gastric lavage.

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**DATE PREPARED 12/20/89 REVISED 02/23/06** 

### MATERIAL SAFETY DATA SHEET **COTRONICS**

300, 3000, UT3300 Ceramic Paper

375 Thermal Stop 390 Ceramic Tapes 360 Ceramic Board 3360 Ceramic Board 370 Ceramic Blanket 3370 Ceramic Blanket 396. 396HT Ceramic Ropes 300LI Loose Insulation

7011, 7012 Thermal Boards

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

**SECTION ONE** 

Chemical Name And Synonyms: N/A Mixture

**Chemical Family:** Aluminosilicate, Alumina, or Silica

**Chemical Formula:** N/A

See Section 9 Comments:

**SECTION 2: COMPOSITION INFORMATION** 

A. As Manufactured: WT. % CAS TVL/PEL Refractory Ceramic Fiber 100 142844-00-6 2f/cc

B. After Normal Use:

See Section 8

All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

**SECTION 3: PHYSICAL DATA** 

**Boiling Point (°F):** N/A Vapor Density (Air = 1): N/A Specific Gravity Range (H<sub>2</sub>O = 1): 0.2-1.0 Percent volatile by Volume: N/A (%)Solubility in Water: **INSOLUBLE** 

Evaporation Rate  $(H_2O = 1)$ :

Appearance and Odor: White Paper Board or Mat. No Odor

Vapor Pressure (mm Hq.): N/A

**SECTION 4: FIRE AND EXPLOSION HAZARD DATA** 

Extinguishing Media Flash Point (Method Used) Flammable Limit

N/A N/A N/A

Unusual Fire and Explosive Hazards Special Fire Fighting Procedures

LEL. UEL N/A N/A

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#### **SECTION 5: HEALTH HAZARD DATA**

Primary Route Of Entry: Inhalation, Ingestion and Skin Irritation **Effects Of Overexposure:** 

Currently, there are no known chronic health effects in humans from long term exposure to refractory ceramic fibers. Animal studies to date are inconclusive. However, based on limited testing, refractory ceramic fibers are a suspected carcinogen in laboratory animals. The Thermal Insulation Manufacturers Association (TIMA) is sponsoring animal inhalation studies as well as epidemiological studies of workers in the industry. Until definite answers become available, strict adherence to recommended safe work practices described elsewhere in this MSDS is advised. This product contains minor amounts of binders which burn out during first heat up. Emergency and First Aid Procedures Terminate Exposure.

SECTION 6: FIRE, EXPLOSIVE AND REACTIVITY DATA

Not Flammable

**SECTION 7: SPILL OR LEAK PROCEDURES** 

Recommended Procedures: N/A

Waste Disposal Method: Routine Housekeeping

**SECTION 8: SPECIAL PROTECTION INFORMATION** 

Respiratory Protection (Specify Type): Dust respirator in compliance with OSHA Standard currently 29 CFR 1910.134 (NIOSH "N OR P100" Approved, air purifying, half

mask or full face-piece respirator.)

Ventilation / Local Exhaust: Follow OSHA Standard 29 CFR 1910.94 Mechanical (General): Follow OSHA Standard 29 CFR 1910.94

Protective Gloves: Recommended

Eye Protection: Goggles/Safety Glasses Recommended

Other Protective Equipment: Long Sleeve, Loose Fitting Clothing and Barrier Cream

Material does not appear on NTP and/or LAC lists of reports for Carcinogens.

#### **SECTION 9: SPECIAL PRECAUTIONS**

#### Precautions to be taken during first exposure to heat:

Trace temporary organic binders will burn off during the first exposure to heat. (500-1000°F) carbon monoxide, carbon dioxide, oxides of nitrogen, reactive hydrocarbons and a small amount of formaldehyde may accompany binder burn-off. Use adequate ventilation or other precautions to eliminate vapors resulting from binder burn-off. Exposure to burn-off fumes may cause respiratory tract irritation.

#### Precautions to be taken after use and upon removal:

This product as manufactured is an aluminosilicate which could transform upon heating to mullite and cristobalite (a form of crystalline silica). Removal of this product after use may result in the generation of dust. Repeated inhalation of respirable free crystalline silica dust may cause delayed lung injury (silicosis). The recommended TLV/PEL for free crystalline silica is derived from the formula: 10 mg/cu m

> 1/2(----)# % Respirable quartz + 2

\*(Reference 1984-85 ACGIH TLV Booklet, Page 34). Appropriate ventilation should be provided and protective equipment should be worn in compliance with OSHA standard currently 29 CFR 1910.134 (NIOSH approved "N OR P100", air purifying, half mask or full face-piece respirator.)

DATE PREPARED: 11/01/85 DATE REVISED: 02/23/06

HIMS RATING Health = 1 Fire = 0 Reactivity = 0 HAZARD RATING: 0 = Insignificant 1 = Non-Toxic, Slight 2 = Moderate 3 = High 4 = Extreme

# MATERIAL SAFETY DATA SHEET COTRONICS

**DURALCO 254 THINNER** 

**Manufactures Name: COTRONICS CORPORATION** 

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

**SECTION ONE** 

Chemical Name and Synonyms: Alkyl Silicone Resin

Chemical Formula: N/A
Chemical Family: Silicone
Comments: N/A

**SECTION 2: COMPOSITION INFORMATION** 

A. Hazardous Materials

Alpha-Isotridecyl-Omega-Hydroxy-Polyglycolether 0.25% - 1.25 %

CAS Registry No.: 9043-30-5

Toluene (trace amount) 0.0025%-0.25%

CAS Registry No108-88-3

All materials contained within are listed on the TSCA Inventory list.

This material is non hazardous under OSHA criteria

There are no carcinogenic ingredients present at or over 0.1% in this material This material contains between 0.005 and .05% of toluene identified as being a developmental reproductive toxin based on animal studies

This product is compliant with the RoHS Directive.

**SECTION 3: PHYSICAL PROPERTY INFORMATION** 

Appearance: White Liquid Odor: Odorless

Melting or Freezing Point: -1°C, 30°F Boiling Point: 100°C, 212°F

Vapor Pressure: 17.25 mm Hg at 20°C (68°F)

Solubility In Water (20°F): Completely Miscible Density: 1.00 - 1.2 g/cm<sup>3</sup>

**pH Value** 5.5-6.5

SECTION 4: FIRE AND EXPLOSION HAZARD DATA

Flash Point:

Boiling Point:

Autoignition Temp.

Lower Explosion Limit (%):

N/A.

Upper Explosion Limit(%):

N/A.

Extinguishing Media: All Standard Firefighting Media.

Special Firefighting Procedures: NA

Material does not burn and does not present any unusual fire or explosion hazards.

**SECTION 5: HEALTH HAZARD DATA** 

**Effects of Overexposure:** *Inhalation:* Excessive inhalation causes headaches, dizziness, nausea and in coordination. Harmful if inhaled. *Eye Contact:* May cause eye irritation. *Skin Contact:* May cause skin irritation. *Ingestion:* Harmful if swallowed. Causes vomiting, nausea, and diarrhea.

No toxic effects are expected and no known physical hazards...

Chronic Effects of Over Exposure: None Expected.

**Emergency and First Aid Procedures:** 

**Ingestion:** If swallowed, do not induce vomiting. Give large quantities of water to drink and get medical attention. Never give anything by mouth to an unconscious person. **Skin:** Remove contaminated clothing and launder before reuse. Wash with soap and

water. Get medical attention if irritation persists.

**Inhalation:** If inhaled, remove to fresh air, if not breathing give artificial respiration, preferably mouth-to-mouth. If breathing is difficult give oxygen. Get Medical attention. **Eyes:** In case of contact, immediately flush eyes with plenty of water for at least 15

minutes and get Medical attention.

**SECTION 6: REACTIVITY INFORMATION** 

Stability: Stable

Hazardous Polymerization: Will not occur.

**Hazardous Decomposition Products:** If stored and handled according to standard industrial practice none known. For the silicone content of the substance measurements have shown the formation of small amounts of formaldehyde at temperatures above 150°F through oxidation.

Incompatibility (Materials to avoid): None Known.

#### **SECTION 7: SPILL OR LEAK PROCEDURES**

Do not introduce into waters, sewage water or soil. Dam in any fluid that runs out using suitable material (earth). Spills of material that reaches waters must be reported to United States coast Guard National Response Centers toll free number 800 424 8802 Wear protective clothing.

**Waste Disposal Methods:** Incinerate liquid in approved equipment. Incinerate contaminated diking material in accordance with local, state and federal regulations. If small amounts absorb with a liquid binding material If large amount pump into suitable containers. Clean any slippery coating that remains using a cold cleaner (petroleum naphtha or a water/surefactant mix)

#### SECTION 8: SPECIAL PROTECTION INFORMATION

Ventilation Type: Normal room ventilation.

**Respiratory Protection:** None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH-approved or equivalent) suitable for concentrations and types of air contaminants encountered.

Protective Gloves: Impervious

Eye Protection: Chemical splash goggles(ANSI Z-871 or approved equivalent)

Other Protective Equipment: Evewash facility.

#### **SECTION 9: SPECIAL PRECAUTIONS**

Keep container tightly closed Protect against sun. Minimum temp allowed during storage and transportation 0°C 32°F.

**Note To Physician:** Allergic dermatitis or respiratory response in susceptible individuals may be delayed even weeks or months after frequent and/or prolonged contact. Acute effects can include mucosa damage, severe laryngeal edema, and shock associated with corrosive agents. Possible mucosa damage may contraindicate the use of gastric lavage.

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DATE PREPARED 12/20/89 REVISED 02/23/06

Page 2 of 2

HIMS RATING Health = 1 Fire = 0 Reactivity = 0 HAZARD RATING: 0 = Insignificant 1 = Non-Toxic, Slight 2 = Moderate 3 = High 4 = Extreme

# MATERIAL SAFETY DATA SHEET COTRONICS DURASEAL 252 THINNER

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

SECTION ONE

Chemical Name and Synonyms: Alkyl Silicone Resin

Chemical Formula: N/A
Chemical Family: Silicone
Comments: N/A

**SECTION 2: COMPOSITION INFORMATION** 

A. Hazardous Materials

Alpha-Isotridecyl-Omega-Hydroxy-Polyglycolether 0.25% - 1.25 %

CAS Registry No.: 9043-30-5

Toluene (trace amount) 0.0025%-0.25%

CAS Registry No108-88-3

All materials contained within are listed on the TSCA Inventory list.

This material is non hazardous under OSHA criteria

There are no carcinogenic ingredients present at or over 0.1% in this material This material contains between 0.005 and .05% of toluene identified as being a developmental reproductive toxin based on animal studies

This product is compliant with the RoHS Directive.

**SECTION 3: PHYSICAL PROPERTY INFORMATION** 

Appearance: White Liquid Odor: Odorless

Melting or Freezing Point: -1°C, 30°F Boiling Point: -10°C, 212°F

Vapor Pressure: 17.25 mm Hg at 20°C (68°F)

Solubility In Water (20°F): Completely Miscible Density: 1.00 - 1.2 g/cm<sup>3</sup>

**pH Value** 5.5-6.5

**SECTION 4: FIRE AND EXPLOSION HAZARD DATA** 

Flash Point:

Boiling Point:

Autoignition Temp.

Lower Explosion Limit (%):

Upper Explosion Limit(%):

N/A.

**Extinguishing Media:** All Standard Firefighting Media.

Special Firefighting Procedures: NA

Material does not burn and does not present any unusual fire or explosion hazards.

**SECTION 5: HEALTH HAZARD DATA** 

**Effects of Overexposure:** *Inhalation:* Excessive inhalation causes headaches, dizziness, nausea and in coordination. Harmful if inhaled. *Eye Contact:* May cause eye irritation. *Skin Contact:* May cause skin irritation. *Ingestion:* Harmful if swallowed. Causes vomiting, nausea, and diarrhea.

No toxic effects are expected and no known physical hazards.,

Chronic Effects of Over Exposure: None Expected.

**Emergency and First Aid Procedures:** 

**Ingestion:** If swallowed, do not induce vomiting. Give large quantities of water to drink and get medical attention. Never give anything by mouth to an unconscious person. **Skin:** Remove contaminated clothing and launder before reuse. Wash with soap and

water. Get medical attention if irritation persists.

*Inhalation:* If inhaled, remove to fresh air, if not breathing give artificial respiration, preferably mouth-to-mouth. If breathing is difficult give oxygen. Get Medical attention. *Eyes:* In case of contact, immediately flush eyes with plenty of water for at least 15

minutes and get Medical attention.

**SECTION 6: REACTIVITY INFORMATION** 

Stability: Stable

Hazardous Polymerization: Will not occur.

**Hazardous Decomposition Products:** If stored and handled according to standard industrial practice none known. For the silicone content of the substance measurements have shown the formation of small amounts of formaldehyde at temperatures above 150°F through oxidation.

Incompatibility (Materials to avoid): None Known.

#### **SECTION 7: SPILL OR LEAK PROCEDURES**

Do not introduce into waters, sewage water or soil. Dam in any fluid that runs out using suitable material (earth). Spills of material that reaches waters must be reported to United States coast Guard National Response Centers toll free number 800 424 8802 Wear protective clothing.

**Waste Disposal Methods:** Incinerate liquid in approved equipment. Incinerate contaminated diking material in accordance with local, state and federal regulations. If small amounts absorb with a liquid binding material If large amount pump into suitable containers. Clean any slippery coating that remains using a cold cleaner (petroleum naphtha or a water/surefactant mix)

#### **SECTION 8: SPECIAL PROTECTION INFORMATION**

**Ventilation Type:** Normal room ventilation.

**Respiratory Protection:** None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH-approved or equivalent) suitable for concentrations and types of air contaminants encountered.

Protective Gloves: Impervious

Eye Protection: Chemical splash goggles(ANSI Z-871 or approved equivalent)

Other Protective Equipment: Evewash facility.

#### **SECTION 9: SPECIAL PRECAUTIONS**

Keep container tightly closed Protect against sun. Minimum temp allowed during storage and transportation 0°C 32°F.

**Note To Physician:** Allergic dermatitis or respiratory response in susceptible individuals may be delayed even weeks or months after frequent and/or prolonged contact. Acute effects can include mucosa damage, severe laryngeal edema, and shock associated with corrosive agents. Possible mucosa damage may contraindicate the use of gastric lavage.

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DATE PREPARED 12/20/89 REVISED 02/23/06

Page 2 of 2

HIMS RATING Health = 1 Fire = 0 Reactivity = 0 HAZARD RATING: 0 = Insignificant 1 = Non-Toxic, Slight 2 = Moderate 3 = High 4 = Extreme

### MATERIAL SAFETY DATA SHEET

# Cotronics Corporation Duralco 215 Thinner

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

**SECTION 1: PRODUCT IDENTIFICATION** 

Chemical Name And Synonyms: N/A Mixture Chemical Family: Alumina Chemical Formula: N/A

Refractory Ceramic Composition (See Type Above) Proprietary Silicate or Alumina Colloid Bond

All materials contained within are listed on the TSCA inventory list.

This product is compliant with the RoHS Directive.

#### **SECTION 2: COMPOSITION INFORMATION**

As Manufactured WT. % TVL/PEL
Water based colloid 100 N/A

Note: Other non hazardous ingredients will not be listed seperately

All materials used in the manufacture of this product are on the TSCA inventory list All materials contained within are listed on the TSCA Inventory list.

SECTION 3: PHYSICAL DATA

As Supplied

Boiling Point (°F): 212
Vapor Density (Air=1): Water
Specific Gravity Range (H2O=1): 1.25 - 2.1
Percent Volatile by Volume: 20 - 50
(%) Solubility in Water: Soluble

Evaporation Rate (H2O=1):

Appearance/Odor: Opalescent liquid, No Odor.

Vapor Pressure (mm Hg.): N/A

#### **SECTION 4: FIRE AND EXPLOSION HAZARD DATA**

Extinguishing Media: N/A
Flash Point (Method Used): N/A
Flammable Limit: N/A
Unusual Fire and Explosive Hazards: N/A
Special Fire Fighting Procedures: N/A
Upper / Lower explosion limits: N/A

#### **SECTION 5: HEALTH HAZARD DATA**

**Effects Of Overexposure:** Slight dermatological irritation after prolonged skin contact. **Emergency And First Aid Procedures:** Flush eyes and skin with copious/quantities of water. Get immediate medical attention for eyes. If swallowed, consult physician immediately.

#### **SECTION 6: FIRE, EXPLOSIVE AND REACTIVITY DATA**

Stability: Stable

Incompatibility (Materials to Avoid): Powdered aluminum metal

Hazardous Decomposition Products: None

Hazardous Polymerization: Will Not Occur

#### SECTION 7: SPILL OR LEAK PROCEDURES

**Steps To Be Taken In Case Material Is Released Or Spilled:** Dispose in approved industrial waste container. Hose spilled liquid with water, immediately. Note Liquid is mildly alkaline.

Waste Disposal Method: Approved industrial waste disposal means.

#### **SECTION 8: SPECIAL PROTECTION INFORMATION**

**Respiratory Protection (Specify Type):** NIOSH approved\* Respirators recommended for spray applications.

**Ventilation:** Local Exhaust: Vacuuming with the vacuum exhaust passing through a high efficiency particulate arresting (HEPA) filter is the exhaust is discharged into the workplace.

**Protective Gloves:** Recommended. **Eye Protection:** Recommended.

Other Protective Equipment: Rubber aprons, lab coats, etc. to protect clothing.

#### **SECTION 9: SPECIAL PRECAUTIONS**

**Precautions to be taken in Handling and Storing:** Keep container closed until ready to use.

Other Precautions: Wash hands thoroughly before eating or smoking. Avoid getting in body openings, including cuts, sores, mouth, etc.

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<sup>\*(</sup>Reference 1984-85 ACGIH TLV Booklet, Page 34). Appropriate ventilation should be provided and protective equipment should be worn in compliance with OSHA standard currently 29 CFR 1910.134 (NIOSH approved, air purifying, half mask or full face-piece respirator with appropriate filter pad or cartridge(s)).

# MATERIAL SAFETY DATA SHEET COTRONICS EPOXY HARDENERS

DURALCO 128, 132, 133, 134, 140

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

#### **SECTION ONE:**

Chemical Name And Synonyms: N/A Mixture\*

Formula: N/A

Chemical Family: 128, 132, 140 - Amine Complex 133 - Acid Anhydride Complex

#### **SECTION 2: PHYSICAL PROPERTY INFORMATION**

Boiling Point: N/A Vapor Density (Air=1): >1

Solubility In Water:Negligible% Volatile (By Weight):NegligibleMelting Or Freezing Point:N/AVapor Pressure (mm Hg):N/ASpecific Gravity (Water=1):0.93 - 1.30

Evaporation Rate (Butyl Acetate=1): <1

Appearance/Odor: Off white opaque amber liquid/Amine odor

All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

#### **SECTION 3: FIRE AND EXPLOSION HAZARD DATA**

Flash Point: >200°F
Auto Ignition Temp: N/A
Lower Explosion Limit (%): N/A
Upper Explosion Limit (%): N/A

Extinguishing Media: Foam, C02, Dry Chemical: Water Spray

#### **SECTION 4: HEALTH HAZARD DATA**

#### **Effects Of Overexposure:**

Inhalation: Mist/Vapor can irritate the nose and throat. LD50 = 9.8 Mg/L ALC

Eye Contact: Substantially irritating to eyes.

Skin Contact: Substance is moderately irritating and can cause superficial burns after

prolonged contact. LD50 = 7500 Mg/Kg ALD

Ingestion: Harmful if swallowed. LD50 = > 2500 Mg/Kg ALD

**Delayed Effects:** Prolonged or repeated exposure can cause allergic reaction.

\*Note all materials contained are listed on the EPA TSCA Inventory list.

DATE PREPARED: 11/01/85 DATE REVISED: 02/23/06

#### **SECTION 5: EMERGENCY AND FIRST AID PROCEDURES**

**Inhalation:** Move subject to fresh air. Give artificial respiration if breathing has stopped. **Eye And Skin Contact:** Flush eyes with a large amount of water for at least 15 minutes. Get prompt medical attention. Wash skin thoroughly with soap and water. Remove and wash clothing before reuse.

*Ingestion:* If swallowed dilute by giving 2 glasses of water to drink. See a physician. Never give anything by mouth to an unconscious person.

#### SECTION 6: REACTIVITY INFORMATION

Stability: Stable

Hazardous Polymerization: Will not occur

#### **SECTION 7: SPILL OR LEAK PROCEDURES**

Dike and absorb spill on inert material (sand, earth, etc.). Transfer diking material to containers for disposal. Wear protective clothing. Use breathing apparatus (MSHA/NIOSH approved, pressure-demand, self-contained) or air mask for large spills in confined area. Wash clothing before reuse. Destroy clothing that cannot be decontaminated (i.e. Shoes).

**Waste Disposal Methods:** Incinerate liquid in approved equipment. Landfill or incinerate contaminated diking material in accordance with local, state and federal regulations.

#### **SECTION 8: SPECIAL PROTECTION INFORMATION**

**Ventilation Type:** Normal room ventilation.

**Respiratory Protection:** None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH approved or equivalent) suitable for concentrations and types of air contaminants encountered.

Protective Gloves: Impervious.

Eye Protection: Chemical splash goggles (ANSI Z-871 or approved equivalent).

Other Protective Equipment: Eyewash facility.

#### **SECTION 9: SPECIAL PRECAUTIONS**

Store away from excessive heat (e.g., steam-pipes, radiators, from sources of ignition, and from reactive materials). Do not store near food or feed. Avoid all eye and skin contact.

*Misc Info:* The use of this and auxiliary materials should be confined to designated work areas. Emptied containers may still contain hazardous residues.

**Note To Physician:** Allergic dermatitis or respiratory response in susceptible individuals may be delayed even weeks or months after frequent and/or prolonged contact. Acute effects can include mucosa damage, severe laryngeal edema, and shock associated with corrosive agents. Possible mucosa damage may contraindicate the use of gastric layage.

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# MATERIAL SAFETY DATA SHEET COTRONICS EPOXY HARDENERS

**DURALCO 128, 132, 133, 140** 

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

#### **SECTION ONE:**

Chemical Name And Synonyms: N/A Mixture\*

Formula: N/A

Chemical Family: 128, 132, 140 - Amine Complex 133 - Acid Anhydride Complex

#### **SECTION 2: PHYSICAL PROPERTY INFORMATION**

Boiling Point: N/A Vapor Density (Air=1): >1

Solubility In Water:Negligible% Volatile (By Weight):NegligibleMelting Or Freezing Point:N/A

Vapor Pressure (mm Hg): N/A Specific Gravity (Water=1): 0.93 - 1.30

Evaporation Rate (Butyl Acetate=1): <1

Appearance/Odor: Off white opaque amber liquid/Amine odor

All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

#### **SECTION 3: FIRE AND EXPLOSION HAZARD DATA**

Flash Point: >200°F
Auto Ignition Temp: N/A
Lower Explosion Limit (%): N/A
Upper Explosion Limit (%): N/A

Extinguishing Media: Foam, C02, Dry Chemical: Water Spray

#### **SECTION 4: HEALTH HAZARD DATA**

#### **Effects Of Overexposure:**

Inhalation: Mist/Vapor can irritate the nose and throat. LD50 = 9.8 Mg/L ALC

Eye Contact: Substantially irritating to eyes.

Skin Contact: Substance is moderately irritating and can cause superficial burns after

prolonged contact. LD50 = 7500 Mg/Kg ALD

Ingestion: Harmful if swallowed. LD50 = > 2500 Mg/Kg ALD

**Delayed Effects:** Prolonged or repeated exposure can cause allergic reaction.

\*Note all materials contained are listed on the EPA TSCA Inventory list.

DATE PREPARED: 11/01/85 DATE REVISED: 02/23/06

#### **SECTION 5: EMERGENCY AND FIRST AID PROCEDURES**

**Inhalation:** Move subject to fresh air. Give artificial respiration if breathing has stopped. **Eye And Skin Contact:** Flush eyes with a large amount of water for at least 15 minutes. Get prompt medical attention. Wash skin thoroughly with soap and water. Remove and wash clothing before reuse.

*Ingestion:* If swallowed dilute by giving 2 glasses of water to drink. See a physician. Never give anything by mouth to an unconscious person.

#### SECTION 6: REACTIVITY INFORMATION

Stability: Stable

Hazardous Polymerization: Will not occur

#### **SECTION 7: SPILL OR LEAK PROCEDURES**

Dike and absorb spill on inert material (sand, earth, etc.). Transfer diking material to containers for disposal. Wear protective clothing. Use breathing apparatus (MSHA/NIOSH approved, pressure-demand, self-contained) or air mask for large spills in confined area. Wash clothing before reuse. Destroy clothing that cannot be decontaminated (i.e. Shoes).

**Waste Disposal Methods:** Incinerate liquid in approved equipment. Landfill or incinerate contaminated diking material in accordance with local, state and federal regulations.

#### **SECTION 8: SPECIAL PROTECTION INFORMATION**

**Ventilation Type:** Normal room ventilation.

**Respiratory Protection:** None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH approved or equivalent) suitable for concentrations and types of air contaminants encountered.

Protective Gloves: Impervious.

Eye Protection: Chemical splash goggles (ANSI Z-871 or approved equivalent).

Other Protective Equipment: Eyewash facility.

#### **SECTION 9: SPECIAL PRECAUTIONS**

Store away from excessive heat (e.g., steam-pipes, radiators, from sources of ignition, and from reactive materials). Do not store near food or feed. Avoid all eye and skin contact

*Misc Info:* The use of this and auxiliary materials should be confined to designated work areas. Emptied containers may still contain hazardous residues.

**Note To Physician:** Allergic dermatitis or respiratory response in susceptible individuals may be delayed even weeks or months after frequent and/or prolonged contact. Acute effects can include mucosa damage, severe laryngeal edema, and shock associated with corrosive agents. Possible mucosa damage may contraindicate the use of gastric layage.

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## MATERIAL SAFETY DATA SHEET COTRONICS

### **310 CERAMIC ADHESIVE**

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

### **SECTION ONE: PRODUCT IDENTIFICATION**

Chemical Name And Synonyms: N/A Mixture

Chemical Family: Alumina Silicate, Alumina, or Silicate

Chemical Formula: N/A

Comments: See Section 9

### SECTION 2: COMPOSITION INFORMATION

	As Manufactured	WT. %	CAS	TVL/PEL
A	Refractory Ceramic Fiber	20 - 30	142844-00-6	2F/cc
	Refractory Ceramic Colloid	30 - 50	Proprietary	
	Water	50 - 70	7732-18-5	
Е	B. After Normal Use	See Sectio	n 8	
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All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

### **SECTION 3: PHYSICAL DATA**

	As Supplied	Cured
Boiling Point (°F) :	212	N/A
Vapor Density (Air=1):	>1	N/A
Specific Gravity Range (H2O=1):	1	0.5 - 0.8
Percent Volatile By Volume:	50 - 70 <b>*</b>	N/A
(%) Solubility In Water:	Soluble	Insoluble
Evaporation Rate (H2O=1):	1	N/A
Appearance/Odor:	Creamy Paste No Odor	. Solid
Vapor Pressure (mm Hg.) :	17	N/A

### **SECTION 4: FIRE AND EXPLOSION HAZARD DATA**

Extinguishing Media: N/A
Flash Point (Method Used): N/A
Flammable Limit: N/A
Unusual Fire and Explosive Hazards: LEL= N/A
Special Fire Fighting Procedures: UEL= N/A

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DATE PREPARED: 11/01/85 DATE REVISED: 02/23/06

### **SECTION 5: HEALTH HAZARD DATA**

Primary Route of Entry: Inhalation, Ingestion and Skin Irritation.

Effects of Overexposure: Currently, there are no known chronic health effects in humans from long term exposure to refractory ceramic fibers. Animal studies to date are inconclusive. However, based on limited testing, refractory ceramic fibers are a suspected carcinogen in laboratory animals. The Thermal Insulation Manufacturers Association (TIMA) is sponsoring animal inhalation studies as well as epidemiological studies of workers in the industry. Until definite answers become available, strict adherence to recommended safe work practices described elsewhere in this MSDS is advised. This product contains minor amounts of binders which burn out during first heat up.

Emergency and First Aid Procedures: Terminate Exposure.

**SECTION 6: FIRE, EXPLOSIVE AND REACTIVITY DATA** 

N/A

### SECTION 7: SPILL OR LEAK PROCEDURES

Recommended Procedures: N/A

Waste Disposal Method: Routine Housekeeping

### **SECTION 8: SPECIAL PROTECTION INFORMATION**

**Respiratory Protection (Specify Type):** Dust respirator in compliance with OSHA STANDARD currently 29 CFR 1910.134 (NIOSH Approved, air purifying, half mask or full face-piece respirator with appropriate filter pad or cartridge(s)).

Ventilation: Local Exhaust: Follow OSHA Standard 29 CFR 1910.94.

Mechanical (General): Follow OSHA Standard 29 CFR 1910.94.

Protective Gloves: Recommended.

Eye Protection: Goggles/Safety Glasses Recommended.

Other Protective Equipment: Long Sleeve, Loose Fitting Clothing and Barrier Cream. Material does not appear on NTP and/or LAC lists of reports for Carcinogens

### **SECTION 9: SPECIAL PRECAUTIONS**

**Precautions To Be Taken During First Exposure To Heat:** Trace temporary organic binders will burn off during the first exposure to heat. (500-1000°F) carbon monoxide, carbon dioxide, oxides of nitrogen, reactive hydrocarbons and a small amount of formaldehyde may accompany binder burn-off. Use adequate ventilation or other precautions to eliminate vapors resulting from binder burn-off. Exposure to bum-off fumes may cause respiratory tract irritation.

Precautions To Be Taken After Use And Upon Removal: This product as manufactured is an alumina silicate which could transform upon heating to mullet and crystobalite (a form of crystalline silica). Removal of this product after use may result in the generation of dust. Repeated inhalation of respirable free crystalline silica dust may cause delayed lung injury (silicosis). The recommended TLV/PEL for free crystalline silica is derived from the formula: 10 mg/cu m

1/2(-----)#

% Respirable quartz + 2

<sup>\*(</sup>Reference 1984-85 ACGIH TLV Booklet, Page 34). Appropriate ventilation should be provided and protective equipment should be worn in compliance with OSHA standard currently 29 CFR 1910.134 (NIOSH approved, air purifying, half mask or full face-piece respirator with appropriate filter pad or cartridge(s)).

### **MATERIAL SAFETY DATA SHEET** COTRONICS

360M Moldable 310 Liquid Foam

372, 372UHT and 3372 Wrap It 3360M Moldable

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

### **SECTION ONE**

Chemical Name And Synonyms: N/A Mixture

Chemical Family: Alumina-silicate, Alumina, Or Silicate

Chemical Formula:

Comments: See Section 9

### **SECTION 2: COMPOSITION INFORMATION**

A.As Manufactured	WT. %	CAS	TVL/PEL
Refractory Ceramic Fiber	20 - 30	142844-00-6	2F/ cc
Refractory Ceramic Colloid	20 - 30	Proprietary	
Water	40 - 50	-	

B. After Normal Use See Section 8

All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

### **SECTION 3: PHYSICAL DATA**

	As Supplied	Cured
Boiling Point (°F):	212	N/A
Vapor Density (Air = 1):	>1	N/A
Specific Gravity Range (H2O = 1):	1	0.5 - 0.8
Percent Volatile by Weight:	70 - 80	N/A
(%) Solubility in Water:	Soluble	Insoluble
Evaporation Rate (H2O = 1):	1	N/A
Appearance and Odor:	Creamy Paste	No Odor. Solid
Vapor Pressure (mm Hg.) :	0.2 - 1.2	N/A

### SECTION 4: FIRE AND EXPLOSION HAZARD DATA

Extinguishing Media: Flash Point (Method Used): Flammable Limit: N/A N/A N/A

Unusual Fire And Explosive Hazards: Special Fire Fighting Procedures:

Lel Uel

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### SECTION 5: HEALTH HAZARD DATA

Primary Route Of Entry: Inhalation, Ingestion and Skin Irritation

### Effects Of Overexposure:

Currently, there are no known chronic health effects in humans from long term exposure to refractory ceramic fibers. Animal studies to date are inconclusive. However, based on limited testing, refractory ceramic fibers are a suspected carcinogen in laboratory animals. The Thermal Insulation Manufacturers Association (TIMA) is sponsoring animal inhalation studies as well as epidemiological studies of workers in the industry. Until definite answers become available, strict adherence to recommended safe work practices described elsewhere in this MSDS is advised. This product contains minor amounts of binders which burn out during first heat up. Emergency and First Aid ProceduresTerminate Exposure.

**SECTION 6: FIRE, EXPLOSIVE AND REACTIVITY DATA** 

N/A

**SECTION 7: SPILL OR LEAK PROCEDURES** 

Recommended Procedures: N/A

Waste Disposal Method: Routine Housekeeping

### **SECTION 8: SPECIAL PROTECTION INFORMATION**

Respiratory Protection (Specify Type): Dust respirator in compliance with OSHA STANDARD currently 29 CFR 1910.134 (NIOSH Approved, air purifying, half mask or

full face-piece respirator with appropriate filter pad or cartridge(s)). Ventilation: Local Exhaust: Follow OSHA Standard 29 CFR 1910.94. Mechanical (General): Follow OSHA Standard 29 CFR 1910.94.

Protective Gloves: Recommended.

Eve Protection: Goggles/Safety Glasses Recommended.

Other Protective Equipment: Long Sleeve, Loose Fitting Clothing and Barrier Cream.

Material does not appear on NTP and/or LAC lists of reports for Carcinogens

### **SECTION 9: SPECIAL PRECAUTIONS**

### Precautions To Be Taken During First Exposure To Heat:

Trace temporary organic binders will burn off during the first exposure to heat. (500 -1000°F) carbon monoxide, carbon dioxide, oxides of nitrogen, reactive hydrocarbons and a small amount of formaldehyde may accompany binder burn-off. Use adequate ventilation or other precautions to eliminate vapors resulting from binder burn-off. Exposure to burn-off fumes may cause respiratory tract irritation.

### Precautions To Be Taken After Use And Upon Removal:

This product as manufactured is an aluminosilicate which could transform upon heating to mullite and crystobalite (a form of crystalline silica). Removal of this product after use may result in the generation of dust. Repeated inhalation of respirable free crystalline silica dust may cause delayed lung injury (silicosis). The recommended TLV/PEL for free crystalline silica is derived from the formula: 10 mg/cu m

1/2(----)#

% Respirable quartz + 2

DATE PREPARED: 11/01/85 DATE REVISED: 02/23/06

<sup>\*</sup> Note for 372 UHT and 3372 thermal decomposition will release corrosive HCl fumes during the first exposure to heat.

<sup>\*(</sup>Reference 1984-85 ACGIH TLV Booklet, Page 34), Appropriate ventilation should be provided and protective equipment should be worn in compliance with OSHA standard currently 29 CFR 1910.134 (NIOSH approved, air purifying, half mask or full face-piece respirator with appropriate filter pad or cartridge(s)).

## **MATERIAL SAFETY DATA SHEET COTRONICS WOVEN CERAMIC FIBER PRODUCTS**

391 Ultra Temp - 398 Thermeez - 395 Thermeez Tape 397 - Thermeez Tape - 399 Ultra Silica

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

**SECTION ONE** 

**Chemical Name And Synonyms:** N/A Mixture

Formula: N/A

**Chemical Family:** 395 and 397 Silicate-Calcium-Alumino complex.

391 Alumina, 399 Silica, 398 Nomex Aramid

**SECTION 2: COMPOSITION INFORMATION** 

A. As Manufactured WT. %

> Ceramic Fiber Dia. 100 6-12 Microns

All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

SECTION 3: PHYSICAL DATA

Boiling Point (°F): N/A

Specific Gravity Range (H2O = 1): 0.2 - 1.2Vapor Pressure (mm Hg.): N/A Vapor Density (Air = 1): N/A Percent Volatile by Volume (%): N/A Solubility in Water: Insoluble

Evaporation Rate (H<sub>2</sub>O = 1): N/A

Appearance and Odor: Fiber Shape. No Odor.

### SECTION 4: FIRE AND EXPLOSION HAZARD DATA

Extinguishing Media: N/A Lower Explosion Limits: N/A Flash Point (Method Used): N/A Upper Explosion Limits: N/A

Flammable Limit: N/A

**Unusual Fire and Explosive Hazards: N/A** Special Fire Fighting Procedures: N/A

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### **SECTION 5: HEALTH HAZARD DATA**

**Primary Route of Entry:** Inhalation, Ingestion

Effects Of Overexposure: nose and throat Irritation and Skin Irritation

Due to their large Diameter (6-12 microns) these Ceramic Fibers are considered nonrespirable and would be expected to cause only minor nose and throat Irritation If inhaled.

These products contains minor amounts of binders which burn out during first heat up.

Emergency and First Aid Procedures Terminate Exposure.

SECTION 6: FIRE, EXPLOSIVE AND REACTIVITY DATA

N/A

SECTION 7: SPILL OR LEAK PROCEDURES

Recommended Procedures: N/A

Waste Disposal Method: Routine Housekeeping

### **SECTION 8: SPECIAL PROTECTION INFORMATION**

Respiratory Protection (Specify Type): Dust respirator in compliance with OSHA STANDARD currently 29 CFR 1910.134 (NIOSH Approved, air purifying, half mask or

full face-piece respirator with appropriate filter pad or cartridge(s)). Ventilation: Local Exhaust: Follow OSHA Standard 29 CFR 1910.94. Mechanical (General): Follow OSHA Standard 29 CFR 1910.94.

Protective Gloves: Recommended.

Eye Protection: Goggles/Safety Glasses Recommended.

Other Protective Equipment: Long Sleeve, Loose Fitting Clothing and Barrier Cream.

Material does not appear on NTP and/or LAC lists of reports for Carcinogens.

### **SECTION 9: SPECIAL PRECAUTIONS**

### Precautions To Be Taken During First Exposure To Heat:

Trace temporary organic binders will burn off during the first exposure to heat.(5001000 °F) carbon monoxide, carbon dioxide, oxides of nitrogen, reactive hydrocarbons may accompany binder burn-off. Use adequate ventilation or other precautions to eliminate vapors resulting from binder burn-off. Exposure to burn-off fumes may cause respiratory tract irritation.

### Precautions To Be Taken after Use and Upon Removal:

For Type 399\*

This product as manufactured is an silica which could transform upon heating to cristobalite (a form of crystalline silica). Removal of this product after use may result in the generation of dust. Repeated inhalation of respirable free crystalline silica dust may cause delayed lung injury (silicosis). The recommended TLV/PEL for free crystalline silica is derived from the formula: 10 mg/cu m

> 1/2(----)# % Respirable quartz + 2

Date prepared: 11/01/85 Date revised: 02/23/06

<sup>\* 395</sup> and 397 is considered as Nuisance dust PEL of 5 mg/m<sup>3</sup>

<sup>\*\*(</sup>Reference 1984-85 ACGIH TLV Booklet, Page 34). Appropriate ventilation should be provided and protective equipment should be worn in compliance with OSHA standard currently 29 CFR 1910.134 (NIOSH approved, air purifying, half mask or full face-piece respirator with appropriate filter pad or cartridge(s).

<sup>\*\*</sup> Not Required for types 391 and 398

### MATERIAL SAFETY DATA SHEET

### COTRONICS EPOXY RESINS

### **EPOX-EEZ RK456 EPOX-EEZ 456**

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

### **SECTION ONE: PRODUCT IDENTIFICATION**

**Chemical Name and Synonyms:** N/A Mixture

**Chemical Formula:** N/A

Proprietary Modified Epoxy Resin.\* Chemical Family:

### **SECTION 2: COMPOSITION INFORMATION**

Chemical Family: CAS

Epoxy Resin Proprietary 50 - 70%S Stainless: Fe 7439-89-6 30 - 50%

> Mo 7439 -98-7 Ch 7440-47-3 Ni 7440-02-0

All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

### **SECTION 3: PHYSICAL PROPERTY INFORMATION**

**Boiling Point:** N/A Vapor Density (Air=1): >1

Solubility In Water: Negligible % Volatile (By Weight): Negligible Specific Gravity (Water=1): 1.1 - 2.0 Vapor Pressure (mm Hg): N/A **Melting Or Freezing Point:** N/A Evaporation Rate (Butvl Acetate=1): <1

Appearance/Odor: Grey to Viscous Black Liquid/Slight Odor

### **SECTION 4: FIRE AND EXPLOSION HAZARD DATA**

Flash Point: >295°F Auto Ignition Temp: N/A Lower xplosion Limit (%): N/A Upper Explosion Limit (%): N/A

Extinguishing Media: Foam, C02, Dry Chemical: Water Spray

### **SECTION 5: HEALTH HAZARD DATA**

Nickel:LD50 Oral Rat >5000mg/kg IRAC found there was inadequate evidence that metallic nickel or chromium is cacinogenic to humans but since there was sufficient evidence that is carcinogenic to animals. IARC concluded that metallic nickel chromium is possibly carcinogenic to humans Epidemiological studies of workers exposed to nickel powder and to dust and fumes generated in the production of nickel alloys and of stainless steel have not indicated the presence of a significant respiratory cancer hazard. Effects Of Overexposure:

Inhalation: Mist or vapor can irritate the nose and throat.

Page 1 of 2

Eye Contact: Substantially irritating to eyes.

Skin Contact: Substance is moderately irritating and can cause superficial burns after

prolonged contact. Not absorbed in toxic amounts

Ingestion: Possibly harmful if swallowed. LD > 4000 mg/Kg.

**Delayed Effects:** Prolonged or repeated exposure can cause allergic reaction. Sara Section 313 Supplier Notification this product contains the following chemicals subject to the reporting requirements of section 313 of the emergency planning and community Right-To-Know Act of 1968 and of 40 CFR 372: Nickel, Chromium. Refer to the Hazardous Ingredients section of the MSDS for CAS numbers.

### **SECTION 6: EMERGENCY AND FIRST AID PROCEDURES**

*Inhalation:* Move subject to fresh air. Give artificial respiration if breathing has stopped. Eye And Skin Contact: Flush eyes with a large amount of water for at least 15 minutes. Get prompt medical attention. Wash skin thoroughly with soap and water. Remove and wash clothing before reuse.

Ingestion: If swallowed dilute by giving 2 glasses of water to drink. See a physician. Never give anything by mouth to an unconscious person.

### **SECTION 7: REACTIVITY INFORMATION**

Stability: Stable

Hazardous Polymerization: Will Not Occur

### **SECTION 8: SPILL OR LEAK PROCEDURES**

Dike and absorb spill on inert material (sand, earth, etc.). Transfer diking material to containers for disposal. Wear protective clothing. Use breathing apparatus (MSHA/NIOSH approved, pressure-demand, self-contained) or air mask for large spills in confined area. Wash clothing before reuse.

Waste Disposal Methods: Incinerate liquid in approved equipment. Landfill or incinerate contaminated diking material in accordance with local, state and federal regulations.

### **SECTION 9: SPECIAL PROTECTION INFORMATION**

**Ventilation Type:** Normal room ventilation.

**Respiratory Protection:** None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH approved or equivalent) suitable for concentrations and types of air contaminants encountered.

Protective Gloves: Impervious.

Eye Protection: Chemical splash goggles (ANSI Z-871 or approved equivalent).

Other Protective Equipment: Eyewash facility.

### **SECTION 10: SPECIAL PRECAUTIONS**

Store away from excessive heat (e.g., steam-pipes, radiators, from sources of ignition, and from reactive materials). Do not store near food or feed. Avoid all eye and skin contact.

Note To Physician: Allergic dermatitis or respiratory response in susceptible individuals may be delayed even weeks or months after frequent and/or prolonged contact. Acute effects can include mucosa damage, severe laryngeal edema, and shock associated with corrosive agents. Possible mucosa damage may contraindicate the use of gastric lavage. (This product is not approved by FDA for internal use). DISCLAIMER: The information supplied is not to be taken as a warranty or representation for which Cotronics Corp. assumes legal responsibility. It is offered solely for your consideration, investigation and verification, all risk of use, singly or in combination with other products, whether or not in accordance with the instructions, directions, or suggestions is borne by the user.

## MATERIAL SAFETY DATA SHEET COTRONICS CORPORATION

#### **RESBOND 507TS RESIN**

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

### **SECTION ONE:**

**Chemical Name And Synonyms:** N/A Mixture

Chemical Formula: N/A

Chemical Family: Proprietary Modified Epoxy Resin

Use with Cotronics' type two hardeners.

### SECTION 2: COMPOSITION INFORMATION

**Boiling Point:** 400°F **Vapor Density (Air=1):** >1

Solubility In Water:

% Volatile (By Weight):

Specific Gravity (Water=1):

Vapor Pressure (mm Hg):

Melting Or Freezing Point:

Evaporation Rate (Butyl Acetate=1):

Negligible

Negligible

Negligible

Negligible

Negligible

1.16

N/A

40°F

Appearance/Odor: Viscous Amber Transparent Liquid - Low Odor.

All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

### SECTION 3: FIRE AND EXPLOSION HAZARD DATA

Flash Point: >295°F
Auto Ignition Temp: N/A
Lower Explosion Limit (%): N/A
Upper Explosion Limit (%): N/A

Extinguishing Media: Foam, C02, Dry Chemical: Water Spray

### **SECTION 4: HEALTH HAZARD DATA**

### **Effects Of Overexposure:**

Inhalation: Mist or vapor can irritate the nose and throat.

Eye Contact: Substantially irritating to eyes.

Skin Contact: Substance is moderately irritating and can cause superficial burns after

prolonged contact. Not absorbed in toxic amounts.

**Ingestion:** Possibly harmful if swallowed.

**Delayed Effects:** Prolonged or repeated exposure can cause allergic reaction.

DATE PREPARED: 11/01/85 DATE REVISED: 02/23/06

### **SECTION 5: EMERGENCY AND FIRST AID PROCEDURES**

**Inhalation:** Move subject to fresh air. Give artificial respiration if breathing has stopped. **Eye And Skin Contact:** Flush eyes with a large amount of water for at least 15 minutes. Get prompt medical attention. Wash skin thoroughly with soap and water. Remove and wash clothing before reuse.

*Ingestion:* If swallowed dilute by giving 2 glasses of water to drink. See a physician. Never give anything by mouth to an unconscious person.

### SECTION 6: REACTIVITY INFORMATION

Stability: Stable

Hazardous Polymerization: Will Not Occur

### **SECTION 7: SPILL OR LEAK PROCEDURES**

Dike and absorb spill on inert material (sand, earth, etc.). Transfer diking material to containers for disposal. Wear protective clothing. Use breathing apparatus (MSHA/NIOSH approved, pressure-demand, self-contained) or air mask for large spills in confined area. Wash clothing before reuse. Destroy clothing that cannot be decontaminated (i.e. Shoes).

**Waste Disposal Methods:** Incinerate liquid in approved equipment. Landfill or incinerate contaminated diking material in accordance with local, state and federal regulations.

### **SECTION 8: SPECIAL PROTECTION INFORMATION**

**Ventilation Type:** Normal room ventilation.

**Respiratory Protection:** None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH approved or equivalent) suitable for concentrations and types

of air contaminants encountered. **Protective Gloves:** Impervious.

**Eve Protection:** Chemical splash goggles (ANSI Z-871 or approved equivalent).

Other Protective Equipment: Eyewash facility.

### **SECTION 9: SPECIAL PRECAUTIONS**

Store away from excessive heat (e.g., steam-pipes, radiators, from sources of ignition, and from reactive materials). Do not store near food or feed.

Corrosive Material: Avoid all eye and skin contact.

*Misc Info:* The use of this and auxiliary materials should be confined to designated work areas. Emptied containers may still contain hazardous residues.

**Note To Physician:** Allergic dermatitis or respiratory response in susceptible individuals may be delayed even weeks or months after frequent and/or prolonged contact. Acute effects can include mucosa damage, severe laryngeal edema, and shock associated with corrosive agents. Possible mucosa damage may contraindicate the use of gastric lavage.

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## MATERIAL SAFETY DATA SHEET COTRONICS EPOXY HARDENERS

Resbond 507TS Hardener

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

**SECTION ONE:** 

Chemical Name And Synonyms: N/A Mixture\*

Formula: N/A Chemical Family: Amine

SECTION 2: PHYSICAL PROPERTY INFORMATION

**Boiling Point:** N/A **Vapor Density (Air=1):** >1

Solubility In Water:Negligible% Volatile (By Weight):NegligibleMelting Or Freezing Point:N/AVapor Pressure (mm Hg):N/ASpecific Gravity (Water=1):0.93 - 1.30

Evaporation Rate (Butyl Acetate=1): <1

Appearance/Odor: Off white opaque amber liquid/Amine odor

All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

**SECTION 3: FIRE AND EXPLOSION HAZARD DATA** 

Flash Point: >200°F
Auto Ignition Temp: N/A
Lower Explosion Limit (%): N/A
Upper Explosion Limit (%): N/A

Extinguishing Media: Foam, C02, Dry Chemical: Water Spray

**SECTION 4: HEALTH HAZARD DATA** 

**Effects Of Overexposure:** 

*Inhalation:* Mist/Vapor can irritate the nose and throat.

Eye Contact: Substantially irritating to eyes.

Skin Contact: Substance is moderately irritating and can cause superficial burns after

prolonged contact.

Ingestion: Possibly harmful if swallowed.

Delayed Effects: Prolonged or repeated exposure can cause allergic reaction.

DATE PREPARED: 11/01/85 DATE REVISED: 02/23/06

### SECTION 5: EMERGENCY AND FIRST AID PROCEDURES

*Inhalation:* Move subject to fresh air. Give artificial respiration if breathing has stopped. *Eye And Skin Contact:* Flush eyes with a large amount of water for at least 15 minutes. Get prompt medical attention. Wash skin thoroughly with soap and water. Remove and wash clothing before reuse.

*Ingestion:* If swallowed dilute by giving 2 glasses of water to drink. See a physician. Never give anything by mouth to an unconscious person.

SECTION 6: REACTIVITY INFORMATION

Stability: Stable

Hazardous Polymerization: Will not occur

### **SECTION 7: SPILL OR LEAK PROCEDURES**

Dike and absorb spill on inert material (sand, earth, etc.). Transfer diking material to containers for disposal. Wear protective clothing. Use breathing apparatus (MSHA/NIOSH approved, pressure-demand, self-contained) or air mask for large spills in confined area. Wash clothing before reuse. Destroy clothing that cannot be decontaminated (i.e. Shoes).

**Waste Disposal Methods:** Incinerate liquid in approved equipment. Landfill or incinerate contaminated diking material in accordance with local, state and federal regulations.

### **SECTION 8: SPECIAL PROTECTION INFORMATION**

Ventilation Type: Normal room ventilation.

**Respiratory Protection:** None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH approved or equivalent) suitable for concentrations and types of air contaminants encountered.

Protective Gloves: Impervious.

Eye Protection: Chemical splash goggles (ANSI Z-871 or approved equivalent).

Other Protective Equipment: Eyewash facility.

### **SECTION 9: SPECIAL PRECAUTIONS**

Store away from excessive heat (e.g., steam-pipes, radiators, from sources of ignition, and from reactive materials). Do not store near food or feed. Avoid all eye and skin contact.

**Misc Info:** The use of this and auxiliary materials should be confined to designated work areas. Emptied containers may still contain hazardous residues.

**Note To Physician:** Allergic dermatitis or respiratory response in susceptible individuals may be delayed even weeks or months after frequent and/or prolonged contact. Acute effects can include mucosa damage, severe laryngeal edema, and shock associated with corrosive agents. Possible mucosa damage may contraindicate the use of gastric layage.

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## MATERIAL SAFETY DATA SHEET COTRONICS EPOXY HARDENERS

### **EPOX-EEZ RK456 EPOX-EEZ 456**

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

### **SECTION ONE:**

Chemical Name And Synonyms: N/A Mixture\*

Formula: N/A
Chemical Family: See Above

### **SECTION 2: PHYSICAL PROPERTY INFORMATION**

**Boiling Point:** N/A **Vapor Density (Air=1):** >1

Solubility In Water:Negligible% Volatile (By Weight):NegligibleMelting Or Freezing Point:N/AVapor Pressure (mm Hg):N/ASpecific Gravity (Water=1):0.93 - 1.30

Evaporation Rate (Butyl Acetate=1): <1

Appearance/Odor: Black/Amine odor

All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

### **SECTION 3: FIRE AND EXPLOSION HAZARD DATA**

Flash Point: >200°F
Auto Ignition Temp: N/A
Lower Explosion Limit (%): N/A
Upper Explosion Limit (%): N/A

Extinguishing Media: Foam, C02, Dry Chemical: Water Spray

### **SECTION 4: HEALTH HAZARD DATA**

### **Effects Of Overexposure:**

Inhalation: Mist/Vapor can irritate the nose and throat.

Eye Contact: Substantially irritating to eyes.

Skin Contact: Substance is moderately irritating and can cause superficial burns after

prolonged contact.

Ingestion: Harmful if swallowed.

**Delayed Effects:** Prolonged or repeated exposure can cause allergic reaction. \*Note all materials contained are listed on the EPA TSCA Inventory list.

### SECTION 5: EMERGENCY AND FIRST AID PROCEDURES

**Inhalation:** Move subject to fresh air. Give artificial respiration if breathing has stopped. **Eye And Skin Contact:** Flush eyes with a large amount of water for at least 15 minutes. Get prompt medical attention. Wash skin thoroughly with soap and water. Remove and wash clothing before reuse.

*Ingestion:* If swallowed dilute by giving 2 glasses of water to drink. See a physician. Never give anything by mouth to an unconscious person.

### SECTION 6: REACTIVITY INFORMATION

Stability: Stable

Hazardous Polymerization: Will not occur

### **SECTION 7: SPILL OR LEAK PROCEDURES**

Dike and absorb spill on inert material (sand, earth, etc.). Transfer diking material to containers for disposal. Wear protective clothing. Use breathing apparatus (MSHA/NIOSH approved, pressure-demand, self-contained) or air mask for large spills in confined area. Wash clothing before reuse. Destroy clothing that cannot be decontaminated (i.e. Shoes).

**Waste Disposal Methods:** Incinerate liquid in approved equipment. Landfill or incinerate contaminated diking material in accordance with local, state and federal regulations.

### **SECTION 8: SPECIAL PROTECTION INFORMATION**

**Ventilation Type:** Normal room ventilation.

**Respiratory Protection:** None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH approved or equivalent) suitable for concentrations and types of air contaminants encountered.

Protective Gloves: Impervious.

Eye Protection: Chemical splash goggles (ANSI Z-871 or approved equivalent).

Other Protective Equipment: Eyewash facility.

### **SECTION 9: SPECIAL PRECAUTIONS**

Store away from excessive heat (e.g., steam-pipes, radiators, from sources of ignition, and from reactive materials). Do not store near food or feed. Avoid all eye and skin contact.

*Misc Info:* The use of this and auxiliary materials should be confined to designated work areas. Emptied containers may still contain hazardous residues.

**Note To Physician:** Allergic dermatitis or respiratory response in susceptible individuals may be delayed even weeks or months after frequent and/or prolonged contact. Acute effects can include mucosa damage, severe laryngeal edema, and shock associated with corrosive agents. Possible mucosa damage may contraindicate the use of gastric lavage.

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**DATE PREPARED: 11/01/85 DATE REVISED: 02/23/06**Page 2 of 2

## MATERIAL SAFETY DATA SHEET COTRONICS CORPORATION

#### **RESBOND 507TS RESIN**

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

### **SECTION ONE:**

**Chemical Name And Synonyms:** N/A Mixture

Chemical Formula: N/A

Chemical Family: Proprietary Modified Epoxy Resin

Use with Cotronics' type two hardeners.

### SECTION 2: COMPOSITION INFORMATION

**Boiling Point:** 400°F **Vapor Density (Air=1):** >1

Solubility In Water:

% Volatile (By Weight):

Specific Gravity (Water=1):

Vapor Pressure (mm Hg):

Melting Or Freezing Point:

Evaporation Rate (Butyl Acetate=1):

Negligible

Negligible

Negligible

Negligible

Negligible

1.16

N/A

40°F

Appearance/Odor: Viscous Amber Transparent Liquid - Low Odor.

All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

### SECTION 3: FIRE AND EXPLOSION HAZARD DATA

Flash Point: >295°F
Auto Ignition Temp: N/A
Lower Explosion Limit (%): N/A
Upper Explosion Limit (%): N/A

Extinguishing Media: Foam, C02, Dry Chemical: Water Spray

### **SECTION 4: HEALTH HAZARD DATA**

### **Effects Of Overexposure:**

Inhalation: Mist or vapor can irritate the nose and throat.

Eye Contact: Substantially irritating to eyes.

Skin Contact: Substance is moderately irritating and can cause superficial burns after

prolonged contact. Not absorbed in toxic amounts.

**Ingestion:** Possibly harmful if swallowed.

**Delayed Effects:** Prolonged or repeated exposure can cause allergic reaction.

DATE PREPARED: 11/01/85 DATE REVISED: 02/23/06

### **SECTION 5: EMERGENCY AND FIRST AID PROCEDURES**

**Inhalation:** Move subject to fresh air. Give artificial respiration if breathing has stopped. **Eye And Skin Contact:** Flush eyes with a large amount of water for at least 15 minutes. Get prompt medical attention. Wash skin thoroughly with soap and water. Remove and wash clothing before reuse.

*Ingestion:* If swallowed dilute by giving 2 glasses of water to drink. See a physician. Never give anything by mouth to an unconscious person.

### SECTION 6: REACTIVITY INFORMATION

Stability: Stable

Hazardous Polymerization: Will Not Occur

### **SECTION 7: SPILL OR LEAK PROCEDURES**

Dike and absorb spill on inert material (sand, earth, etc.). Transfer diking material to containers for disposal. Wear protective clothing. Use breathing apparatus (MSHA/NIOSH approved, pressure-demand, self-contained) or air mask for large spills in confined area. Wash clothing before reuse. Destroy clothing that cannot be decontaminated (i.e. Shoes).

**Waste Disposal Methods:** Incinerate liquid in approved equipment. Landfill or incinerate contaminated diking material in accordance with local, state and federal regulations.

### **SECTION 8: SPECIAL PROTECTION INFORMATION**

**Ventilation Type:** Normal room ventilation.

**Respiratory Protection:** None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH approved or equivalent) suitable for concentrations and types

of air contaminants encountered. **Protective Gloves:** Impervious.

**Eve Protection:** Chemical splash goggles (ANSI Z-871 or approved equivalent).

Other Protective Equipment: Eyewash facility.

### **SECTION 9: SPECIAL PRECAUTIONS**

Store away from excessive heat (e.g., steam-pipes, radiators, from sources of ignition, and from reactive materials). Do not store near food or feed.

Corrosive Material: Avoid all eye and skin contact.

*Misc Info:* The use of this and auxiliary materials should be confined to designated work areas. Emptied containers may still contain hazardous residues.

**Note To Physician:** Allergic dermatitis or respiratory response in susceptible individuals may be delayed even weeks or months after frequent and/or prolonged contact. Acute effects can include mucosa damage, severe laryngeal edema, and shock associated with corrosive agents. Possible mucosa damage may contraindicate the use of gastric lavage.

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## MATERIAL SAFETY DATA SHEET COTRONICS EPOXY HARDENERS

Resbond 507TS Hardener

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

**SECTION ONE:** 

Chemical Name And Synonyms: N/A Mixture\*

Formula: N/A Chemical Family: Amine

SECTION 2: PHYSICAL PROPERTY INFORMATION

**Boiling Point:** N/A **Vapor Density (Air=1):** >1

Solubility In Water:Negligible% Volatile (By Weight):NegligibleMelting Or Freezing Point:N/AVapor Pressure (mm Hg):N/ASpecific Gravity (Water=1):0.93 - 1.30

Evaporation Rate (Butyl Acetate=1): <1

Appearance/Odor: Off white opaque amber liquid/Amine odor

All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

**SECTION 3: FIRE AND EXPLOSION HAZARD DATA** 

Flash Point: >200°F
Auto Ignition Temp: N/A
Lower Explosion Limit (%): N/A
Upper Explosion Limit (%): N/A

Extinguishing Media: Foam, C02, Dry Chemical: Water Spray

**SECTION 4: HEALTH HAZARD DATA** 

**Effects Of Overexposure:** 

*Inhalation:* Mist/Vapor can irritate the nose and throat.

Eye Contact: Substantially irritating to eyes.

Skin Contact: Substance is moderately irritating and can cause superficial burns after

prolonged contact.

Ingestion: Possibly harmful if swallowed.

Delayed Effects: Prolonged or repeated exposure can cause allergic reaction.

DATE PREPARED: 11/01/85 DATE REVISED: 02/23/06

### SECTION 5: EMERGENCY AND FIRST AID PROCEDURES

*Inhalation:* Move subject to fresh air. Give artificial respiration if breathing has stopped. *Eye And Skin Contact:* Flush eyes with a large amount of water for at least 15 minutes. Get prompt medical attention. Wash skin thoroughly with soap and water. Remove and wash clothing before reuse.

*Ingestion:* If swallowed dilute by giving 2 glasses of water to drink. See a physician. Never give anything by mouth to an unconscious person.

SECTION 6: REACTIVITY INFORMATION

Stability: Stable

Hazardous Polymerization: Will not occur

### **SECTION 7: SPILL OR LEAK PROCEDURES**

Dike and absorb spill on inert material (sand, earth, etc.). Transfer diking material to containers for disposal. Wear protective clothing. Use breathing apparatus (MSHA/NIOSH approved, pressure-demand, self-contained) or air mask for large spills in confined area. Wash clothing before reuse. Destroy clothing that cannot be decontaminated (i.e. Shoes).

**Waste Disposal Methods:** Incinerate liquid in approved equipment. Landfill or incinerate contaminated diking material in accordance with local, state and federal regulations.

### **SECTION 8: SPECIAL PROTECTION INFORMATION**

Ventilation Type: Normal room ventilation.

**Respiratory Protection:** None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH approved or equivalent) suitable for concentrations and types of air contaminants encountered.

Protective Gloves: Impervious.

Eye Protection: Chemical splash goggles (ANSI Z-871 or approved equivalent).

Other Protective Equipment: Eyewash facility.

### **SECTION 9: SPECIAL PRECAUTIONS**

Store away from excessive heat (e.g., steam-pipes, radiators, from sources of ignition, and from reactive materials). Do not store near food or feed. Avoid all eye and skin contact.

**Misc Info:** The use of this and auxiliary materials should be confined to designated work areas. Emptied containers may still contain hazardous residues.

**Note To Physician:** Allergic dermatitis or respiratory response in susceptible individuals may be delayed even weeks or months after frequent and/or prolonged contact. Acute effects can include mucosa damage, severe laryngeal edema, and shock associated with corrosive agents. Possible mucosa damage may contraindicate the use of gastric layage.

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# MATERIAL SAFETY DATA SHEET COTRONICS WOVEN CERAMIC FIBER PRODUCTS

### 640 Double Sided Tape

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

**SECTION ONE** 

Chemical Name & Synonyms: Glass Cloth, Pressure Sensitive, Double sided tape

Formula: N/A Chemical Family: N/A

**SECTION 2: COMPOSITION INFORMATION** 

A. As Manufactured CAS WT. % ACGIH TLV OSHA PEL

Fibrous glass 65997-17-3 10-60 1mg/m3 considered nuisance dust

Trimethylated silica 068988567 5-30 N/A Dimethyl siloxane 070131678 5-30 N/A

Hydroxy terminated

Evaporation Rate (H<sub>2</sub>O = 1):

All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

**SECTION 3: PHYSICAL DATA** 

Boiling Point (°F): N/A
Specific Gravity Range (H2O = 1): N/A
Vapor Pressure (mm Hg.): N/A
Vapor Density (Air = 1): N/A
Percent Volatile by Volume (%): N/A
Solubility in Water: Insoluble

Appearance and Odor: White/Off white coated fabric with pres.

Sens. Adhesive and paper or plastic release liner. Fiber Shape. No Odor.

**SECTION 4: FIRE AND EXPLOSION HAZARD DATA** 

N/A

Extinguishing Media:N/ALower Explosion Limits:N/AFlash Point (Method Used):N/AUpper Explosion Limits:N/A

Flammable Limit: N/A solid material

Unusual Fire and Explosive Hazards: N/A Special Fire Fighting Procedures: N/A

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### **SECTION 5: HEALTH HAZARD DATA**

### Effects Of Overexposure:

Skin Contact with pressure sensitive adhesive faces may cause skin irritation or injury. Eyes not likely to have contact

Inhalation none know

Ingestion not likely to be ingested

Delayed Effects none known

nose and throat Irritation and Skin Irritation

### SECTION 6: FIRE, EXPLOSIVE AND REACTIVITY DATA

### **Stable**

Materials to Avoid: strong oxidizers, acids, bases, organic solvents

Avoid excessive temperatures and high humidity

Hazardous polymerization will not occur

### **SECTION 7: SPILL OR LEAK PROCEDURES**

**Waste Disposal Method:** Non toxic non water soluble non biodegradable dispose of in an approved landfill or by incineration in compliance with federal state and local regulation

### **SECTION 8: SPECIAL PROTECTION INFORMATION**

**Respiratory Protection (Specify Type):** Dust respirator in compliance with OSHA STANDARD currently 29 CFR 1910.134 (NIOSH Approved, air purifying, half mask or full face-piece respirator with appropriate filter pad or cartridge(s)).

Ventilation: Local Exhaust:

Protective Gloves: Recommended.

Eye Protection: Goggles/Safety Glasses Recommended.

Other Protective Equipment: Long Sleeve, Loose Fitting Clothing and Barrier Cream.

Material does not appear on NTP and/or LAC lists of reports for Carcinogens.

### SECTION 9: SPECIAL PRECAUTIONS

### Precautions To Be Taken During First Exposure To Heat:

Trace temporary organic binders will burn off during the first exposure to heat.(5001000 °F) carbon monoxide, carbon dioxide, oxides of nitrogen, reactive hydrocarbons may accompany binder burn-off. Use adequate ventilation or other precautions to eliminate vapors resulting from binder burn-off. Exposure to burn-off fumes may cause respiratory tract irritation.

### Precautions To Be Taken after Use and Upon Removal:

For Type 399\*

This product as manufactured is an silica which could transform upon heating to cristobalite (a form of crystalline silica). Removal of this product after use may result in the generation of dust. Repeated inhalation of respirable free crystalline silica dust may cause delayed lung injury (silicosis). The recommended TLV/PEL for free crystalline silica is derived from the formula: 10 mg/cu m

1/2(----)#

% Respirable quartz + 2

## MATERIAL SAFETY DATA SHEET COTRONICS 700 SERIES CASTABLE CERAMICS

RTC-60 Castable Alumina Ceramic
RTC-70 Castable Alumina Ceramic
740 Liquid Alumina Silica
750 Liquid Fused Silica
760 Liquid Zirconium Oxide
770 Liquid Silicon Carbide
780 Liquid Alumina
310LF Liquid Ceramic Foam

**Rescor LX** 

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

**SECTION ONE** 

Chemical Name And Synonyms: N/A Mixture

Formula: N/A

Base (part A) : Powder

Chemical Family: Refractory Ceramic Composition. Proprietary Alumina, Zirconia,

Silica, Silicon Carbide.

Activator (Part B): Liquid

Chemical Family: Proprietary Water Based Colloid Composition (Alumina, Silica)

All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

### SECTION 2: COMPOSITION INFORMATION

A.	As Manufactured	WT. %	TVL/PEL
Base:	Respirable Nuisance Dust	100	5 mg/cu m*

<sup>\* (1984-85</sup> ACGIH TLV Booklet, Page 50)

### SECTION 3A: BASE (POWDER) PHYSICAL DATA

Boiling Point (°F): N/A
Specific Gravity Range (H2O = 1): 0.9 - 3.1
Vapor Pressure (mm Hg.): N/A
Vapor Density (Air=1): N/A
Percent Volatile by Volume (%): N/A
Solubility in Water: Insoluble
Evaporation Rate (=1): N/A

Appearance and Odor: Fine Powdered Matrix with Coarse Aggregate

No Odor.

### SECTION 3B: ACTIVATOR (LIQUID) PHYSICAL DATA

**Activator Supplied with** RTC-70, 740, 750, 760, 780, 360LF, Rescor LX

Boiling Point (°F): 212

Specific Gravity Range (H2O = 1): 1.25 - 2.1

Vapor Pressure (mm Hg.): 24 @ 77°F

Vapor Density (Air=1): Water

Percent Volatile by Weight (%): 50-70

Solubility in Water: Soluble

Evaporation Rate (=1): 1

Appearance and Odor: Opalescent liquid No Odor.

### **SECTION 4: FIRE AND EXPLOSION HAZARD DATA**

Extinguishing Media: N/A
Flash Point (Method Used): N/A
Flammable Limit: N/A
Unusual Fire And Explosive Hazards: LEL = N/A
Special Fire Fighting Procedures: UEL = N/A

### **SECTION 5: HEALTH HAZARD DATA**

Primary Route Of Entry: Inhalation.

**Effects of Overexposure:** Nuisance dust may cause Nasal, Throat or Lung irritation or discomfort May aggravate Bronchial disorders. Slight dermatological irritation after prolonged skin contact.

**Emergency And First Aid Procedures:** Flush eyes and skin with copious quantities of water. Get immediate medical attention for eyes. If swallowed, consult physician immediately.

### **SECTION 6: FIRE, EXPLOSIVE AND REACTIVITY DATA**

Stability: Stable Incompatibility (Materials to Avoid): None Hazardous Decomposition Products: None

Hazardous Polymerization: Will Not Occur

### **SECTION 7: SPILL OR LEAK PROCEDURES**

### Steps to be Taken in Case Material is Released or Spilled:

Sweep up spilled powder and dispose in approved industrial waste container. Hose spilled neat cement paste with water, immediately. Cement is not water soluble after setting up. *Waste Disposal Method:* Approved industrial waste disposal means.

### **SECTION 8: SPECIAL PROTECTION INFORMATION**

Respiratory Protection (Specify Type):

Dust respirator in compliance with OSHA Standard currently 29 CFR 1910.134 (NIOSH approved, air purifying , half mask or full face-piece respirator with appropriate filter pad or cartridge (s)).

Ventilation: Local Exhaust: Follow OSHA Standard 29 CFR 1910.94. Mechanical (General): Follow OSHA Standard 29 CFR 1910.94.

### **SECTION 8: SPECIAL PRECAUTIONS**

This product as manufactured contains silicate which could transform upon heating to mullet and crystolbalite (a form of crystalline silica). Removal of this product after use may result in the generation of dust. Repeated inhalation of respirable free crystalline silica is derived from the formula

10 mg/cu m
½(-----)#
% Respirable quartz +

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DATE PREPARED: 11/01/85 DATE REVISED: 02/23/06

<sup>\*(</sup>Reference 1984-85 ACGIH TLV Booklet, Page 34). Appropriate ventilation should be provided and protective equipment should be worn in compliance with OSHA standard currently 29 CFR 1910.134 (NIOSH approved, air purifying, half mask or full face-piece respirator with appropriate filter pad or cartridge(s)).

### MATERIAL SAFETY DATA SHEET

## Resbond Ceramic Binders 791, 792, 793, 794, 795, 797

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

### SECTION ONE: PRODUCT IDENTIFICATION

Chemical Name And Synonyms: N/A Mixture

Chemical Family:Alumina, Silica, Zirconia, PhosphateChemical Family:Refractory Ceramic Colloid based on.

Proprietary Silicate, Phosphate, Alumina, Zirconia, Colloid Bond.

### **SECTION 2: COMPOSITION INFORMATION**

As Manufactured:	WT. %	TVL/PEL	
A. Liquid Binder or Thinner			
Refractory Ceramic Colloid	20 - 50	N/A	
Water	50 - 80		
B. After Normal Use See Section 8			
C. Mist or Dried dust from spraying	30 - 50	10 mg/m <sup>3</sup>	
(Not formed in normal use)		•	
All Masterials assets in all within and facets of an	the TCCA Inventor	. Lint	

All Materials contained within are located on the TSCA Inventory List

This product is compliant with the RoHS Directive.

### **SECTION 3: PHYSICAL DATA**

	As Supplied:	Cured:
Boiling Point (°F) :	212	N/A
Vapor Density (Air=1):	>1	N/A
Specific Gravity Range (H2O=1):	1 - 2.2	1 .2 - 2.5
Percent Volatile by Volume:	20 - 50	N/A
(%) Solubility in Water:	Soluble	Insoluble
Evaporation Rate (H2O=1):	1	N/A
Appearance/Odor:	Clear or Opalescent Liquid	Solid, No Odor
Vapor Pressure (mm Hg.) :	0.2 - 1.2	N/A

### SECTION 4: FIRE AND EXPLOSION HAZARD DATA

Extinguishing Media: N/A
Flash Point (Method Used): N/A
Flammable Limit: N/A
Unusual Fire And Explosive Hazards: LEL = N/A
Special Fire Fighting Procedures: UEL = N/A

**SECTION 5: HEALTH HAZARD DATA** 

**Primary Route Of Entry:** Inhalation, Ingestion, Eyes and Skin Irritation. **Effects Of Overexposure:** Long term overexposure to inhalation of mists or dust of dried down particles may cause tissue response in the lung (PNEUMOCONIOSIS). **Emergency & First Aid Procedures:** Terminate exposure. Flush eyes with water for 15 minutes.

**SECTION 6: FIRE, EXPLOSIVE AND REACTIVITY DATA** 

N/A

**SECTION 7: SPILL OR LEAK PROCEDURES** 

**Recommended Procedures:** Routine Housekeeping, Wash With Water.

Waste Disposal Method: Industrial waste disposal means.

### **SECTION 8: SPECIAL PROTECTION INFORMATION**

**Respiratory Protection (Specify Type):** Respiratory protection is not normally needed since the volatility and toxicity are low. If significant mists or aerosols are generated, wear a NIOSH approved or equivalent respirator, (ANSI Z 88.2, 1980 for requirements and selection).

Ventilation: 1910.94

Local Exhaust: Follow OSHA Standard 29 CFR

Mechanical (General): Follow OSHA Standard 29 CFR 1910.94

Protective Gloves: Recommended

Eye Protection: Goggles/Safety Glasses Recommended

Other Protective Equipment: As required to meet applicable OSHA Standards.

### **SECTION 9: SPECIAL PRECAUTION**

### Precautions To Be Taken After Use And Upon Removal:

This product as manufactured is a Silicate could transform upon heating to mullet and crystobalite (a form of crystalline silica). Removal of this product after use may result in the generation of dust. Repeated inhalation of respirable free crystalline silica dust may cause delayed lung injury (silicosis). The recommended TLV/PEL for free crystalline silica is derived from the formula: 10 mg/cu m

1/2(-----)#

% Respirable quartz + 2

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<sup>\*(</sup>Reference 1984-85 ACGIH TLV Booklet, Page 34). Appropriate ventilation should be provided and protective equipment should be worn in compliance with OSHA standard currently 29 CFR 1910.134 (NIOSH approved, air purifying, half mask or full face-piece respirator with appropriate filter pad or cartridge(s)).

### MATERIAL SAFETY DATA SHEET

## **Cotronics 800 SERIES THINNERS & ACTIVATORS**

Use With the Equivalent 800 Series Compound

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

### **SECTION ONE:**

Chemical Name And Synonyms: N/A Mixture

Chemical Family: Alumina, Quartz, Magnesia, Zirconia, or Silica

**Chemical Family:** Refractory Ceramic Colloid Proprietary Silicate, Phosphate, Alumina, Zirconia, Colloid Bond.

### **SECTION 2: COMPOSITION INFORMATION**

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	As Manufactured:	WT. %	TVL/PEL
A.	Liquid Binder or Thinner		
	Refractory Ceramic Colloid	20 - 50	N/A
	Water	50 - 80	
В.	After Normal Use See Section 8		
C.	Mist or Dried dust from spraying	30 - 50	10 mg/m3
	(Not formed in normal use)		

All Materials contained within are located on the TSCA Inventory List

This product is compliant with the RoHS Directive.

### **SECTION 3: PHYSICAL DATA**

	As Supplied:	Cured:
Boiling Point (°F) :	212	N/A
Vapor Density (Air=1):	>1	N/A
Specific Gravity Range (H2O=1):	1 - 2.2	1.2 - 2.5
Percent Volatile by Volume:	20 - 50	N/A
(%) Solubility in Water:	Soluble	Insoluble
Evaporation Rate (H2O=1):	1	N/A
Appearance/Odor:	Clear or Opalescent Liquid	Solid, No Odor
Vapor Pressure (mm Hq.) :	0.2 - 1.2	N/A

### SECTION 4: FIRE AND EXPLOSION HAZARD DATA

Extinguishing Media: N/A
Flash Point (Method Used): N/A
Flammable Limit: N/A
Unusual Fire and Explosive Hazards: LEL = N/A
Special Fire Fighting Procedures: UEL = N/A

DATE PREPARED: 11/01/85 DATE REVISED: 02/23/06

### **SECTION 5: HEALTH HAZARD DATA**

**Primary Route Of Entry:** Inhalation, Ingestion, Eyes and Skin Irritation. **Effects Of Overexposure:** Long term overexposure to inhalation of mists or dust of dried down particles may cause tissue response in the lung (PNEUMOCONIOSIS). **Emergency & First Aid Procedures:** Terminate exposure. Flush eyes with water for 15 minutes.

**SECTION 6: FIRE, EXPLOSIVE AND REACTIVITY DATA** 

N/A

SECTION 7: SPILL OR LEAK PROCEDURES

Recommended Procedures: Routine Housekeeping, Wash With Water.

Waste Disposal Method: Industrial waste disposal means.

### SECTION 8: SPECIAL PROTECTION INFORMATION

**Respiratory Protection (Specify Type):** Respiratory protection is not normally needed since the volatility and toxicity are low. If significant mists or aerosols are generated, wear a NIOSH approved or equivalent respirator, (ANSI Z 88.2, 1980 for requirements and selection).

Ventilation: 1910.94

Local Exhaust: Follow OSHA Standard 29 CFR

Mechanical (General): Follow OSHA Standard 29 CFR 1910.94

Protective Gloves: Recommended

Eye Protection: Goggles/Safety Glasses Recommended

Other Protective Equipment: As required to meet applicable OSHA Standards.

### **SECTION 9: SPECIAL PRECAUTION**

### Precautions To Be Taken After Use And Upon Removal:

This product as manufactured is a Silicate could transform upon heating to mullet and crystobalite (a form of crystalline silica). Removal of this product after use may result in the generation of dust. Repeated inhalation of respirable free crystalline silica dust may cause delayed lung injury (silicosis). The recommended TLV/PEL for free crystalline silica is derived from the formula: 10 mg/cu m

1/2(-----)#

% Respirable quartz + 2

(Reference 1984-85 ACGIH TLV Booklet, Page 34). Appropriate ventilation should be provided and protective equipment should be worn in compliance with OSHA standard currently 29 CFR 1910.134 (NIOSH approved, air purifying, half mask or full face-piece respirator with appropriate filter pad or cartridge(s)).

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# MATERIAL SAFETY DATA SHEET TRADE NAME COTRONICS DURAPOT 800 SERIES

DURAPOT 801 DURAPOT 804 DURAPOT 805 DURAPOT 808 DURAPOT 809 DURAPOT 810 DURAPOT 814 DURAPOT 820 DURAPOT 821

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

### SECTION ONE: PRODUCT IDENTIFICATION

Chemical Name And Synonyms: N/A Mixture

Chemical Family: Alumina, Quartz, Magnesia, Zirconia, or Silica

**Chemical Family:** Refractory Ceramic Colloid Proprietary Silicate, Phosphate, Alumina, Zirconia, Colloid Bond.

### SECTION 2: COMPOSITION INFORMATION

As Manufactured:	WT. %	TVL/PEL
A. Liquid Binder or Thinner		
Refractory Ceramic Colloid	20 - 50	N/A
Water	50 - 80	
<b>B.</b> After Normal Use See Section 8		
C. Mist or Dried dust from spraying	30 - 50	10 mg/m <sup>3</sup>
(Not formed in normal use)		· ·

All Materials contained within are located on the TSCA Inventory Lis This product is compliant with the RoHS Directive.t

### **SECTION 3: PHYSICAL DATA**

	As Supplied	As Cured
Boiling Point (§F):	212ºF	N/A
Specific Gravity (H2O=1):	1.2 - 1.4	1.2-2.5
Vapor Pressure (mm Hg.) :	0.2-1.2	N/A
Vapor Density (Air=1):	>1	N/A
Percent Volatile By Volume:	20-50	N/A
Solubility In Water:	Soluble	Insoluble
Evaporation Rate (H2O=1):	1	N/A
Appearance/Odor:	Clear or Opalescent liquid	Solid
	/No Odor	No Odor

### SECTION 4: FIRE AND EXPLOSION HAZARD DATA

Extinguishing Media: N/A
Flash Point (Method Used): N/A
Flammable Limit: N/A
Unusual Fire and Explosive Hazards: LEL = N/A
Special Fire Fighting Procedures: UEL = N/A

### **SECTION 5: HEALTH HAZARD DATA**

Primary Route Of Entry: Inhalation, Ingestion, Eyes and Skin Irritation.

Effects Of Overexposure: Long term overexposure to inhalation of mists or dust of dried down particles may cause tissue response in the lung (Pneumoconiosis).

Emergency & First Aid Procedures: Terminate exposure. Flush eyes with water for 15 minutes. Call a doctor

**SECTION 6: FIRE, EXPLOSIVE AND REACTIVITY DATA** 

N/A

**SECTION 7: SPILL OR LEAK PROCEDURES** 

Recommended Procedures: Routine Housekeeping

Waste Disposal Method: N/A

### **SECTION 8: SPECIAL PROTECTION INFORMATION**

**Respiratory Protection (Specify Type):** Respiratory protection is not normally needed since the volatility and toxicity are low. If significant mists or aerosols are generated, wear a NIOSH approved or equivalent respirator, (ANSI Z-88.2, 1980 for requirements and selection).

Ventilation: Local Exhaust: Follow OSHA Standard 29 CFR 1910.94. Mechanical (General): Follow OSHA Standard 29 CFR 1910.94.

Protective Gloves: Recommended.

Eye Protection: Goggles/Safety Glasses Recommended.

Other Protective Equipment: As required to meet applicable OSHA Standards .

### **SECTION 9: SPECIAL PRECAUTIONS**

Precautions To Be Taken After Use And Upon Removal: This product as manufactured is a Silicate could transform upon heating to mullet and crystobalite (a form of crystalline silica). Removal of this product after use may result in the generation of dust. Repeated inhalation of respirable free crystalline silica dust may cause delayed lung injury (silicosis). The recommended TLV/PEL for free crystalline silica is derived from the formula: 10 mg/cu m

1/2(-----)#

% Respirable quartz + 2

\*(Reference 1984-85 ACGIH TLV Booklet, Page 34). Appropriate ventilation should be provided and protective equipment should be worn in compliance with OSHA standard currently 29 CFR 1910.134 (NIOSH approved, air purifying, half mask or full face-piece respirator with appropriate filter pad or cartridge(s)).

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DATE PREPARED: 11/01/85 DATE REVISED: 02/23/06

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### MATERIAL SAFETY DATA SHEET TRADE NAME **COTRONICS DURAPOT 800 SERIES**

**DURAPOT 801 DURAPOT 804 DURAPOT 805 DURAPOT 808 DURAPOT 809 DURAPOT 810 DURAPOT 814 DURAPOT 820 DURAPOT 821** 

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

SECTION ONE:

Chemical Name And Synonyms: N/A Mixture

Formula: N/A

Refractory Ceramic Composition Chemical Family:

Comments: N/A

Proprietary Silicate, Phosphate, Alumina, Zirconia, Bond

**SECTION 2: COMPOSITION INFORMATION** 

As Manufactured WT. % TVL/PELRespirable Nuisance

Part A

Dust 100 5 mg/cu m\*

\*(1984-85 ACGIH TLV Booklet, Page 50) After Normal Use See Section 8

Part B See page 2

All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

**SECTION 3: PHYSICAL DATA** 

Boiling Point (°F): N/A

Specific Gravity Range (H2O = 1): 0.9 - 3.1

Vapor Pressure (mm Hg.) : N/A Vapor Density (Air=1): N/A

Percent Volatile by Volume (%): N/A

Solubility in Water: Insoluble Evaporation Rate (=1): N/A

Appearance/Odor: Coarse Aggregate with Fine Powdered Matrix.

No Odor.

**SECTION 4: FIRE AND EXPLOSION HAZARD DATA** 

Flash Point (Method Used): Flammable Limit: Extinguishing Media:

N/A N/A N/A

**Unusual Fire and Explosive Hazards:** Special Fire Fighting Procedures:

Lel Uel = N/AN/A **SECTION 5: HEALTH HAZARD DATA** 

Threshold Limit Value: None

Effects Of Overexposure: Slight dermatological irritation after prolonged skin contact. Emergency And First Aid Procedures: Flush eyes and skin with copious quantities of water. Get immediate medical attention for eyes. If swallowed, consult physician

immediately.

**SECTION 6: FIRE, EXPLOSIVE AND REACTIVITY DATA** 

Stability: Stable Incompatibility (Materials to Avoid): None **Hazardous Decomposition Products:** None

**Hazardous Polymerization:** Will Not Occur

**SECTION 7: SPILL OR LEAK PROCEDURES** 

Steps To Be Taken In Case Material Is Released Or Spilled:

Sweep up spilled powder and dispose in approved industrial waste container.

Hose spilled neat cement paste with water, immediately. Cement is not water soluble

after setting up.

Waste Disposal Method: Approved industrial waste disposal means.

**SECTION 8: SPECIAL PROTECTION INFORMATION** 

Respiratory Protection (Specify Type): Respirators recommended for applications.

Ventilation: Local Exhaust: Dust Mechanical (General): Dust Protective Gloves: Recommended Eve Protection: Recommended

Other Protective Equipment: Rubber aprons, lab coats, etc. to protect clothing.

**SECTION 9: SPECIAL PRECAUTIONS** 

Precautions To Be Taken In Handling And Storing: Keep container closed and

avoid getting wet until ready to use.

Other Precautions: Wash Hands Thoroughly Before Eating Or Smoking. Avoid

Getting Powder In Body Openings, Including Cuts, Sores, Mouth, Etc.

\*(Reference 1984-85 ACGIH TLV Booklet, Page 34). Appropriate ventilation should be provided and protective equipment should be worn in compliance with OSHA standard currently 29 CFR 1910.134 (NIOSH approved, air purifying, half mask or full face-piece respirator with appropriate filter pad or cartridge(s)).

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## MATERIAL SAFETY DATA SHEET TRADE NAME

### **DURAPOT 815 Binder**

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

**SECTION ONE: PRODUCT IDENTIFICATION** 

Chemical Name And Synonyms: N/A Mixture

Chemical Family: Alkyl Silicone Resin, Refractory Ceramic Colloid

Chemical Formula: N/A

**SECTION 2: COMPOSITION INFORMATION** 

Hazardous Materials CAS WT. %

Alpha-Isotridecyl-Omega-Hydroxy-

Polyglycolether 9043-30-5 0.25%-1.25% Toluene (trace amount) 108-88-3 0.0025%-0.25%

All Materials contained within are located on the TSCA Inventory List

This material is considered to be non hazardous according to OSHA Criteria

There are no carcinogenic materials present at or over 0.1% in this material. This material contains between 0.0025% and 0.25% of toluene identified as being a developmental reproductive toxin based on animal studies

This product is compliant with the RoHS Directive.

**SECTION 3: PHYSICAL DATA** 

As Supplied

**Boiling Point** (§**F**): 212°F **Specific Gravity (H2O=1)**: 1.2 - 1.4

Vapor Pressure (mm Hg.): 17.25 mm Hg at 20°C

Vapor Density (Air=1): >1
Percent Volatile By Volume: 20-50

**Solubility In Water:** Completely miscible

Evaporation Rate (H2O=1):

Appearance/Odor: Clear or Opalescent liquid

No Odor

SECTION 4: FIRE AND EXPLOSION HAZARD DATA

Extinguishing Media: N/A
Flash Point (Method Used): N/A
Flammable Limit: N/A
Unusual Fire and Explosive Hazards: LEL = N/A
Special Fire Fighting Procedures: UEL = N/A

### **SECTION 5: HEALTH HAZARD DATA**

**Primary Route Of Entry:** Inhalation, Ingestion, Eyes and Skin Irritation.

**Effects Of Overexposure:** Long term overexposure to inhalation of mists or dust of dried down particles may cause tissue response in the lung (Pneumoconiosis).

Emergency & First Aid Procedures: Terminate exposure. Flush eyes with water for

15 minutes. Call a doctor.

**SECTION 6: FIRE, EXPLOSIVE AND REACTIVITY DATA** 

Stability: Stable

Incompatibility (Materials to Avoid): None Hazardous Decomposition Products: None

**Hazardous Polymerization**: Will not occur if stored and handled in accordance with standard industrial practices. The following applies for the silicone content of the substance measurements have shown the formation of small amounts of formaldehyde

at temp. Above about 150°C through oxidation.

**SECTION 7: SPILL OR LEAK PROCEDURES** 

Recommended Procedures: Routine Housekeeping

**Waste Disposal Method:** Prevent from entering surface waters. Contain any spills with suitable maerail (earth) and dispose of according to local state and federal regulations.

**SECTION 8: SPECIAL PROTECTION INFORMATION** 

**Respiratory Protection (Specify Type):** Respiratory protection is not normally needed since the volatility and toxicity are low. Recommended to wear a NIOSH approved or equivalent respirator, (ANSI Z-88.2, 1980 for requirements and selection).

Ventilation: Local Exhaust: Follow OSHA Standard 29 CFR 1910.94.

Mechanical (General): Follow OSHA Standard 29 CFR 1910.94.

Protective Gloves: Recommended.

Eye Protection: Goggles/Safety Glasses Recommended.

Other Protective Equipment: As required to meet applicable OSHA Standards.

**SECTION 9: SPECIAL PRECAUTIONS** 

Keep container tightly closed. Protect against sun. Minimum temp. Protect against frost. Allowed during storage and transportation 0°C /32°F.

Note to Physician Allergic dermatitis or respiratory response in susceptible individuals may be delayed even weeks or months after frequent and / or prolonged contact. Acute effects can include mucosa damage, severe laryngeal edema, and shock associated with corrosive agents. Possible mucosa damage may contraindicate the use of gastric lavage.

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DATE PREPARED: 11/01/85 DATE REVISED: 02/23/06

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## PROPRIETARY MATERIAL SAFETY DATA SHEET COTRONICS EPOXY RESINS

## Durapot 861 Durapot 861 Durapot 862 Durapot 863 Durapot 864 Durapot 865 Durapot 866 Durapot 867 Durapot 868

**SECTION ONE: SUPPLIER INFORMATION** 

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

**SECTION 2: COMPOSITION INFORMATION** 

Chemical Family Part A Resin:

Epoxy Resin: Proprietary Novalac Epoxy 98 - 100%

Part B Hardener:

Proprietary Organic Amines 98 - 100%

Contains No MDA

All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

**SECTION 3: PHYSICAL PROPERTY INFORMATION** 

Melting or Freezing Point:<30°F</th>Boiling Point:>300°FVapor Pressure (mm Hg):N/AVapor Density (Air=1):>1.

Solubility In Water: Negligible % Volatile (By Weight): Negligible

Specific Gravity (Water=1): Resin 0.7 - 1.0/Hardener 0.8 - 1.0 gm./cc

Evaporation Rate (Butyl Acetate=1): <1

Appearance/Odor: Resin: Viscous Amber liquid/Sweet odor

Hardener: Amber transparent liquid/Ammoniaodor

**SECTION 4: FIRE AND EXPLOSION HAZARD DATA** 

Flash Point: >295°F Auto Ignition Temp: N/A Lower Explosion Limit (%): N/A Upper Explosion Limit (%): N/A

Extinguishing Media: Foam, CO<sub>2</sub>, Dry

**Chemical:** Water Spray

**SECTION 5: HEALTH HAZARD DATA** 

**Effects Of Overexposure:** 

**Inhalation:** Mist or vapor can irritate the nose and throat.

Eye Contact: Substantially irritating to eyes.

Skin Contact: Substance is moderately irritating and can cause superficial burns after

prolonged contact. Not absorbed in toxic amounts.

Ingestion: Harmful if swallowed.

**Delayed Effects:** Prolonged or repeated exposure can cause allergic reaction.

### **SECTION 6: EMERGENCY AND FIRST AID PROCEDURES**

**Inhalation:** Move subject to fresh air. Give artificial respiration if breathing has stopped. **Eye And Skin Contact:** Flush eyes with a large amount of water for at least 15 minutes. Get prompt medical attention. Wash skin thoroughly with soap and water. Remove and wash clothing before reuse.

*Ingestion:* If swallowed dilute by giving 2 glasses of water to drink. See a physician. Never give anything by mouth to an unconscious person.

### SECTION 7: REACTIVITY INFORMATION

Stability: Stable.

Hazardous Polymerization: Will Not Occur.

### SECTION 8: SPILL OR LEAK PROCEDURES

Dike and absorb spill on inert material (sand, earth, etc.). Transfer diking material to containers for disposal. Wear protective clothing. Use breathing apparatus (MSHA/NIOSH approved, pressure-demand, self-contained) or air mask for large spills in confined area. Wash clothing before reuse. Destroy clothing that cannot be decontaminated (i.e. shoes).

**Waste Disposal Methods:** Incinerate liquid in approved equipment. Landfill or incinerate contaminated diking material in accordance with local, state and federal regulations.

### SECTION 9: SPECIAL PROTECTION INFORMATION

Ventilation Type: Normal room ventilation.

**Respiratory Protection:** None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH approved or equivalent) suitable for concentrations and types of air contaminants encountered.

**Protective Gloves:** Impervious.

Eye Protection: Chemical splash goggles (ANSI Z-871 or approved equivalent)

Other Protective Equipment: Eyewash facility.

### **SECTION 10: SPECIAL PRECAUTIONS**

Store away from excessive heat (e.g., steam-pipes, radiators, from sources of ignition, and from reactive materials). Do not store near food or feed.

Corrosive Material: Avoid all eye and skin contact.

*Misc Info:* The use of this and auxiliary materials should be confined to designated work areas. Emptied containers may still contain hazardous residues.

**Note To Physician:** Allergic dermatitis or respiratory response in susceptible individuals may be delayed even weeks or months after frequent and/or prolonged contact. Acute effects can include mucosa damage, severe laryngeal edema, and shock associated with corrosive agents. Possible mucosa damage may contraindicate the use of gastric lavage.

This Data Sheet Contains Propriety Information Provided by Cotronics Corp For The Purpose of Safety and Materials Handling.

DATE PREPARED: 11/01/85 DATE REVISED: 02/23/06

Page 1 of 2

## MATERIAL SAFETY DATA SHEET COTRONICS EPOXY HARDENERS

Durapot 861 Durapot 862 Durapot 863 Durapot 864 Durapot 865 Durapot 866 Durapot 867 Durapot 868

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

### **SECTION ONE:**

Chemical Name And Synonyms: N/A Mixture\*

Formula: N/A

**Chemical Family:** 861, 864, 865, 866, 867 - Amine Complex

862, 863, 868 - Acid Anhydride Complex

### **SECTION 2: PHYSICAL PROPERTY INFORMATION**

Boiling Point: N/A Vapor Density (Air=1): >1

Solubility In Water:Negligible% Volatile (By Weight):NegligibleMelting Or Freezing Point:N/AVapor Pressure (mm Hg):N/ASpecific Gravity (Water=1):0.93 - 1.30

Evaporation Rate (Butyl Acetate=1): <1

Appearance/Odor: Off white opaque amber liquid/Amine odor

All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

### **SECTION 3: FIRE AND EXPLOSION HAZARD DATA**

Flash Point: >200°F
Auto Ignition Temp: N/A
Lower Explosion Limit (%): N/A
Upper Explosion Limit (%): N/A

Extinguishing Media: Foam, C02, Dry Chemical: Water Spray

### **SECTION 4: HEALTH HAZARD DATA**

### **Effects Of Overexposure:**

*Inhalation:* Mist/Vapor can irritate the nose and throat.

Eve Contact: Substantially irritating to eves.

Skin Contact: Substance is moderately irritating and can cause superficial burns after

prolonged contact.

Ingestion: Harmful if swallowed.

**Delayed Effects:** Prolonged or repeated exposure can cause allergic reaction.

### **SECTION 5: EMERGENCY AND FIRST AID PROCEDURES**

*Inhalation:* Move subject to fresh air. Give artificial respiration if breathing has stopped. *Eye And Skin Contact:* Flush eyes with a large amount of water for at least 15 minutes. Get prompt medical attention. Wash skin thoroughly with soap and water. Remove and wash clothing before reuse.

*Ingestion:* If swallowed dilute by giving 2 glasses of water to drink. See a physician. Never give anything by mouth to an unconscious person.

### **SECTION 6: REACTIVITY INFORMATION**

Stability: Stable

Hazardous Polymerization: Will not occur

### SECTION 7: SPILL OR LEAK PROCEDURES

Dike and absorb spill on inert material (sand, earth, etc.). Transfer diking material to containers for disposal. Wear protective clothing. Use breathing apparatus (MSHA/NIOSH approved, pressure-demand, self-contained) or air mask for large spills in confined area. Wash clothing before reuse. Destroy clothing that cannot be decontaminated (i.e. Shoes).

**Waste Disposal Methods:** Incinerate liquid in approved equipment. Landfill or incinerate contaminated diking material in accordance with local, state and federal regulations.

### **SECTION 8: SPECIAL PROTECTION INFORMATION**

**Ventilation Type:** Normal room ventilation.

**Respiratory Protection:** None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH approved or equivalent) suitable for concentrations and types of air contaminants encountered.

Protective Gloves: Impervious.

Eye Protection: Chemical splash goggles (ANSI Z-871 or approved equivalent).

Other Protective Equipment: Eyewash facility.

### **SECTION 9: SPECIAL PRECAUTIONS**

Store away from excessive heat (e.g., steam-pipes, radiators, from sources of ignition, and from reactive materials). Do not store near food or feed. Avoid all eye and skin contact.

*Misc Info:* The use of this and auxiliary materials should be confined to designated work areas. Emptied containers may still contain hazardous residues.

**Note To Physician:** Allergic dermatitis or respiratory response in susceptible individuals may be delayed even weeks or months after frequent and/or prolonged contact. Acute effects can include mucosa damage, severe laryngeal edema, and shock associated with corrosive agents. Possible mucosa damage may contraindicate the use of gastric lavage.

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DATE PREPARED: 11/01/85 DATE REVISED: 02/23/06 Page 2 of 2

## MATERIAL SAFETY DATA SHEET TRADE NAME

### **Cotronics Corp**

**Durapot 815** 

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

**SECTION ONE:** 

Chemical Name And Synonyms: N/A Mixture

Formula: N/A

Chemical Family: Refractory Ceramic Composition

Comments: N/A

Proprietary Silicate, Phosphate, Alumina, Zirconia, Bond

**SECTION 2: COMPOSITION INFORMATION** 

As Manufactured WT. % TVL/PELRespirable Nuisance

Part A

Dust 100 5 mg/cu m\*

\*(1984-85 ACGIH TLV Booklet, Page 50) After Normal Use See Section 8

Part B See page 2

All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

**SECTION 3: PHYSICAL DATA** 

**Boiling Point (°F):** N/A **Specific Gravity Range (H2O = 1):** 0.9 - 3.1

Vapor Pressure (mm Hg.):

Vapor Density (Air=1):

N/A

Percent Volatile by Volume (%):

N/A

Solubility in Water: Insoluble Evaporation Rate (=1): N/A

Appearance/Odor: Coarse Aggregate with Fine Powdered Matrix.

No Odor.

SECTION 4: FIRE AND EXPLOSION HAZARD DATA

Extinguishing Media: Flash Point (Method Used): Flammable Limit:

N/A N/A N/A

Unusual Fire and Explosive Hazards: Special Fire Fighting Procedures:

Lel Uel = N/A N/A

**SECTION 5: HEALTH HAZARD DATA** 

Threshold Limit Value: None

**Effects Of Overexposure:** Slight dermatological irritation after prolonged skin contact. **Emergency And First Aid Procedures:** Flush eyes and skin with copious quantities of water. Get immediate medical attention for eyes. If swallowed, consult physician

immediately.

**SECTION 6: FIRE, EXPLOSIVE AND REACTIVITY DATA** 

Stability: Stable Incompatibility (Materials to Avoid): None Hazardous Decomposition Products: None

Hazardous Polymerization: Will Not Occur

**SECTION 7: SPILL OR LEAK PROCEDURES** 

Steps To Be Taken In Case Material Is Released Or Spilled:

Sweep up spilled powder and dispose in approved industrial waste container.

Hose spilled neat cement paste with water, immediately. Cement is not water soluble after setting up.

nter setting up.

Waste Disposal Method: Approved industrial waste disposal means.

**SECTION 8: SPECIAL PROTECTION INFORMATION** 

Respiratory Protection (Specify Type): Respirators recommended for applications.

Ventilation: Local Exhaust: Dust Mechanical (General): Dust Protective Gloves: Recommended Eye Protection: Recommended

Other Protective Equipment: Rubber aprons, lab coats, etc. to protect clothing.

**SECTION 9: SPECIAL PRECAUTIONS** 

Precautions To Be Taken In Handling And Storing: Keep container closed and

avoid getting wet until ready to use.

Other Precautions: Wash Hands Thoroughly Before Eating Or Smoking. Avoid

Getting Powder In Body Openings, Including Cuts, Sores, Mouth, Etc.

\*(Reference 1984-85 ACGIH TLV Booklet, Page 34). Appropriate ventilation should be provided and protective equipment should be worn in compliance with OSHA standard currently 29 CFR 1910.134 (NIOSH approved, air purifying, half mask or full face-piece respirator with appropriate filter pad or cartridge(s)).

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DATE PREPARED: 11/01/85 DATE REVISED: 02/23/06

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## PROPRIETARY MATERIAL SAFETY DATA SHEET DURAPOT 861A

Cotronics High Temp. High-Adhesion Epoxy

SECTION ONE: SUPPLIER INFORMATION

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

### **SECTION 2: COMPOSITION INFORMATION**

Chemical Family	CAS#	%
Part A Resin:		

Part A Resin:

\* 98 - 100%

Part B Hardener:

Proprietary Organic Amines 98 - 100%

Contains No MDA

This product is compliant with the RoHS Directive.

### **SECTION 3: PHYSICAL PROPERTY INFORMATION**

Melting Or Freezing Point:	No data
Boiling Point:	No data
Vapor Pressure (mm Hg) :	No data
Vapor Density (Air=1) :	>1
Solubility In Water:	Negligible
% Volatile (By Weight):	Negligible

Specific Gravity (Water=1): Resin 0.9 - 1.2/Hardener 0.9 - 1.2 gr./cc

Evaporation Rate (Butyl Acetate=1):

Appearance/Odor:

Resin: Viscous Amber liquid/Sweet odor
Hardener: Amber transparent liquid/Ammonia odor

### SECTION 4: FIRE AND EXPLOSION HAZARD DATA

Flash Point: >295°F
Auto Ignition Temp: N/A
Lower Explosion Limit (%): N/A
Upper Explosion Limit (%): N/A

Extinguishing Media: Foam, C02, Dry Chemical: Water Spray

### SECTION 5: HEALTH HAZARD DATA

### **Effects Of Overexposure:**

*Inhalation:* Mist or vapor can irritate the nose and throat.

Eye Contact: Substantially irritating to eyes.

Skin Contact: Substance is moderately irritating and can cause superficial burns after

prolonged contact. Not absorbed in toxic amounts.

Ingestion: Harmful if swallowed.

### SECTION 6: EMERGENCY AND FIRST AID PROCEDURES

**Inhalation:** Move subject to fresh air. Give artificial respiration if breathing has stopped. **Eye And Skin Contact:** Flush eyes with a large amount of water for at least 15 minutes. Get prompt medical attention. Wash skin thoroughly with soap and water. Remove and wash clothing before reuse.

**Ingestion:** If swallowed dilute by giving 2 glasses of water to drink. See a physician.

Never give anything by mouth to an unconscious person.

### **SECTION 7: REACTIVITY INFORMATION**

Stability: Stable.

Hazardous Polymerization: Will not occur.

### **SECTION 8: SPILL OR LEAK PROCEDURES**

Dike and absorb spill on inert material (sand, earth, etc.). Transfer diking material to containers for disposal. Wear protective clothing. Use breathing apparatus (MSHA/NIOSH approved, pressure-demand, self-contained) or air mask for large spills in confined area. Wash clothing before reuse. Destroy clothing that cannot be decontaminated (i.e. Shoes).

**Waste Disposal Methods:** Incinerate liquid in approved equipment. Landfill or incinerate contaminated diking material in accordance with local, state and federal regulations.

### **SECTION 9: SPECIAL PROTECTION INFORMATION**

Ventilation Type: Normal room ventilation.

**Respiratory Protection:** None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH approved or equivalent) suitable for concentrations and types

of air contaminants encountered. **Protective Gloves:** Impervious.

Eye Protection: Chemical splash goggles (ANSI Z-871 or approved equivalent).

Other Protective Equipment: Eyewash facility.

### **SECTION 10: SPECIAL PRECAUTIONS**

Store away from excessive heat (e.g., steam-pipes, radiators, from sources of ignition, and from reactive materials). Do not store near food or feed.

Corrosive Material: Avoid all eye and skin contact...

Misc Info: The use of this and auxiliary materials should be confined to designated

work areas. Emptied containers may still contain hazardous residues.

**Note To Physician:** Allergic dermatitis or respiratory response in susceptible individuals may be delayed even weeks or months after frequent and/or prolonged contact. Acute effects can include mucosa damage, severe laryngeal edema, and shock associated with corrosive agents. Possible mucosa damage may contraindicate the use of gastric lavage.

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DATE PREPARED: 11/01/85 DATE REVISED: 02/23/06

<sup>\*</sup> Proprietary Novalac Epoxy Resins

### **MATERIAL SAFETY DATA SHEET**

## Cotronics 900 Series One Component Ceramic Adhesives 901, 904, 907, 931C, 989

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

### **SECTION ONE:**

Chemical Name And Synonyms: N/A Mixture

Chemical Family: Mica, Silica, Alumina, Graphite Magnesia, or

Zirconia

Chemical Formula: N/A

Refractory Ceramic Composition (See Type Above)

Proprietary Silicate, Phosphate, Alumina, Zirconia, Colloid Bond

### **SECTION 2: COMPOSITION INFORMATION**

As Ma	anufactured:	WT. %	TVL/PEL
A. Refrac	tory Ceramic Powder	20 - 40	5 mg/ Cu M
Refrac	ctory Ceramic Colloid	20 - 30	5 mg/ Cu M
Water	•	Balance	· ·

All materials contained within are listed on the TSCA Inventory list

This product is compliant with the RoHS Directive..

### **SECTION 3: PHYSICAL DATA**

	As Supplied	Cured
Boiling Point (°F):	212	N/A
Vapor Density (Air=1):	>1	N/A
Specific Gravity Range (H2O=1):	1.5 - 3	1.2 - 2.5
Percent Volatile by Volume:	20 - 50	N/A
(%) Solubility in Water:	Soluble	Insoluble
Evaporation Rate (H2O=1):	1	N/A
Appearance/Odor:	Creamy Paste/No Odor	Solid
Vapor Pressure (mm Hq.):	0.2 - 1.2	N/A

### SECTION 4: FIRE AND EXPLOSION HAZARD DATA

Extinguishing Media: N/A
Flash Point (Method Used): N/A
Flammable Limit: N/A
Unusual Fire And Explosive Hazards: Lel = N/A
Special Fire Fighting Procedures: Uel = N/A

DATE PREPARED: 11/01/85 DATE REVISED: 02/23/06

### SECTION 5: HEALTH HAZARD DATA

**Effects of Overexposure:** Slight dermatological irritation after prolonged skin contact. **Emergency And First Aid Procedures:** Flush eyes and skin with copious quantities of water. Get immediate medical attention for eyes. If swallowed, consult physician immediately.

### SECTION 6: FIRE, EXPLOSIVE AND REACTIVITY DATA

Stability: Stable Incompatibility (Materials to Avoid): None Hazardous Decomposition Products: None

Hazardous Polymerization: Will Not Occur

### **SECTION 7: SPILL OR LEAK PROCEDURES**

Steps To Be Taken In Case Material Is Released Or Spilled: Sweep up spilled powder and dispose in approved industrial waste container. Hose spilled wet cement paste with water, immediately. Cement is not water soluble after setting up. Note liquid is mild acid.

Waste Disposal Method: Approved industrial waste disposal means.

### **SECTION 8: SPECIAL PROTECTION INFORMATION**

**Respiratory Protection (Specify Type):** NIOSH approved\* respirators recommended for spray applications.

**Ventilation:** Local Exhaust: Vacuuming with the vacuum exhaust passing through a high efficiency particulate arresting (HEPA) filter is the exhaust is discharged into the workplace.

Protective Gloves: Recommended Eye Protection: Recommended

Other Protective Equipment: Rubber aprons, lab coats, etc. to protect clothing.

### **SECTION 9: SPECIAL PRECAUTIONS**

**Precautions to be Taken in Handling and Storing:** Keep container closed and avoid getting wet until ready to use.

**Other Precautions:** Wash Hands Thoroughly Before Eating or Smoking. Avoid Getting Powder in Body Openings, Including Cuts, Sores, Mouth, etc.

Precautions To Be Taken After Use And Upon Removal: This product as manufactured contains Silicate which could transform upon heating to mullet and crystobalite (a form of crystalline silica). Removal of this product after use may result in the generation of dust. Repeated inhalation of respirable free crystalline silica dust may cause delayed lung injury (silicosis). The recommended TLV/PEL for free crystalline silica is derived from the formula: 10 mg/cu m

1/2(----)#

% Respirable quartz + 2

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<sup>\*(</sup>Reference 1984-85 ACGIH TLV Booklet, Page 34). Appropriate ventilation should be provided and protective equipment should be worn in compliance with OSHA standard currently 29 CFR 1910.134 (NIOSH approved, air purifying, half mask or full face-piece respirator with appropriate filter pad or cartridge(s)).

# MATERIAL SAFETY DATA SHEET COTRONICS 901 CERAMIC ADHESIVE 3901 CERAMIC ADHESIVE

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

**SECTION ONE: PRODUCT IDENTIFICATION** 

Chemical Name And Synonyms: N/A Mixture

Chemical Family: Alumina Silicate, Alumina, or Silicate

Chemical Formula: N/A

Comments: See Section 9

### **SECTION 2: COMPOSITION INFORMATION**

As Manufactured	WT. %	CAS	TVL/PEL
A. Refractory Ceramic Fiber	20 - 30	142844-00-6	2F/cc
Refractory Ceramic Colloid	30 - 50	Proprietary	
Water	50 - 70	7732-18-5	
B. After Normal Use	See Section	8	
All materials contained within are listed on the TSCA Inventory list.			

SECTION 3: PHYSICAL DATA

This product is compliant with the RoHS Directive.

	As Supplied	Cured
Boiling Point (°F):	212	N/A
Vapor Density (Air=1):	>1	N/A
Specific Gravity Range (H2O=1):	1	0.5 - 0.8
Percent Volatile By Volume:	50 - 70 <b>*</b>	N/A
(%) Solubility In Water:	Soluble	Insoluble
Evaporation Rate (H2O=1):	1	N/A
Appearance/Odor:	Creamy Paste No Odor.	Solid
Vapor Pressure (mm Hg.) :	17	N/A

### **SECTION 4: FIRE AND EXPLOSION HAZARD DATA**

Extinguishing Media: N/A
Flash Point (Method Used): N/A
Flammable Limit: N/A
Unusual Fire and Explosive Hazards: LEL= N/A
Special Fire Fighting Procedures: UEL= N/A

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DATE PREPARED: 11/01/85 DATE REVISED: 02/23/06

### SECTION 5: HEALTH HAZARD DATA

**Primary Route of Entry:** Inhalation, Ingestion and Skin Irritation.

Effects of Overexposure: Currently, there are no known chronic health effects in humans from long term exposure to refractory ceramic fibers. Animal studies to date are inconclusive. However, based on limited testing, refractory ceramic fibers are a suspected carcinogen in laboratory animals. The Thermal Insulation Manufacturers Association (TIMA) is sponsoring animal inhalation studies as well as epidemiological studies of workers in the industry. Until definite answers become available, strict adherence to recommended safe work practices described elsewhere in this MSDS is advised. This product contains minor amounts of binders which burn out during first heat up.

Emergency and First Aid Procedures: Terminate Exposure.

### **SECTION 6: FIRE, EXPLOSIVE AND REACTIVITY DATA**

N/A

### **SECTION 7: SPILL OR LEAK PROCEDURES**

Recommended Procedures: N/A

Waste Disposal Method: Routine Housekeeping

### **SECTION 8: SPECIAL PROTECTION INFORMATION**

**Respiratory Protection (Specify Type):** Dust respirator in compliance with OSHA STANDARD currently 29 CFR 1910.134 (NIOSH Approved, air purifying, half mask or full face-piece respirator with appropriate filter pad or cartridge(s)).

**Ventilation:** Local Exhaust: Follow OSHA Standard 29 CFR 1910.94. Mechanical (General): Follow OSHA Standard 29 CFR 1910.94.

Protective Gloves: Recommended.

Eye Protection: Goggles/Safety Glasses Recommended.

Other Protective Equipment: Long Sleeve, Loose Fitting Clothing and Barrier Cream. Material does not appear on NTP and/or LAC lists of reports for Carcinogens

### **SECTION 9: SPECIAL PRECAUTIONS**

**Precautions To Be Taken During First Exposure To Heat:** Trace temporary organic binders will burn off during the first exposure to heat. (500-1000°F) carbon monoxide, carbon dioxide, oxides of nitrogen, reactive hydrocarbons and a small amount of formaldehyde may accompany binder burn-off. Use adequate ventilation or other precautions to eliminate vapors resulting from binder burn-off. Exposure to bum-off fumes may cause respiratory tract irritation.

**Precautions To Be Taken After Use And Upon Removal:** This product as manufactured is an alumina silicate which could transform upon heating to mullet and crystobalite (a form of crystalline silica). Removal of this product after use may result in the generation of dust. Repeated inhalation of respirable free crystalline silica dust may cause delayed lung injury (silicosis). The recommended TLV/PEL for free crystalline silica is derived from the formula: 10 mg/cu m

½(-----)#

% Respirable quartz + 2

<sup>\*(</sup>Reference 1984-85 ACGIH TLV Booklet, Page 34). Appropriate ventilation should be provided and protective equipment should be worn in compliance with OSHA standard currently 29 CFR 1910.134 (NIOSH approved, air purifying, half mask or full face-piece respirator with appropriate filter pad or cartridge(s)).

## MATERIAL SAFETY DATA SHEET TRADE NAME

### **COTRONICS 900 SERIES MACHINABLE CERAMICS**

310 CERAMIC FOAM 914 MACHINABLE GLASS 902 MACHINABLE CERAMIC 915 MACHINABLE GLASS 56L MACHINABLE GRAPHITE 960 MACHINABLE ALUMINA 311 CERAMIC 961 ALUMINA CERAMIC

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

**SECTION ONE: PRODUCT IDENTIFICATION** 

**Chemical Name and Synonyms:** N/A Mixture

Formula: N/A

Chemical Family: Refractory Ceramic Composition

Comments: N/A

Proprietary Alumina, Zirconia, Silica, Mica and Glass.

All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

### **SECTION 2: COMPOSITION INFORMATION**

These products are solid materials produced by combining various raw materials (eg oxides, silicates, etc.) and supplied as Solid Ceramic Rods & Plates.

Dust from machining operations Limits

WT. % TVL/PEL

A. Respirable Nuisance Dust 100 5 mg/cu m

**SECTION 3: PHYSICAL DATA** 

Boiling Point (°F): N/A
Specific Gravity Range (H2O=1): 0.9 - 3.1
Vapor Pressure (mm Hg.): N/A
Vapor Density (Air=1): N/A
Percent Volatile By Volume (%): N/A
Solubility In Water: Insoluble
Evaporation Rate (=1): N/A

Appearance/Odor: Machinable Solid Ceramic Rods & Plates/No Odor.

SECTION 4: FIRE AND EXPLOSION HAZARD DATA

**Extinguishing Media:** The material is non flammable.

Flash Point (method Used): N/A
Flammable Limit: N/A
Unusual Fire and Explosive Hazards: N/A
Special Fire Fighting Procedures: N/A

DATE PREPARED: 11/01/85 DATE REVISED: 02/23/06

### **SECTION 5: HEALTH HAZARD DATA**

Primary Route Of Entry: Inhalation of machining dusts.

**Effects Of Overexposure:** Nuisance dust may cause Nasal, Throat or Lung irritation or discomfort may aggravate Bronchial disorders. Slight dermatological irritation after

prolonged skin contact.

Threshold Limit Value: None.

**Emergency and First Aid Procedures:** Flush eyes and skin with copious quantities of water. Get immediate medical attention for eyes. If swallowed, consult physician immediately.

Note 310 and 902 contain Crystalline silica which is listed by IARC as a Group 1A carcinogen. NTP list this material as a reasonably anticipated carcinogen.

### SECTION 6: FIRE, EXPLOSIVE AND REACTIVITY DATA

Stability: Stable Incompatibility (Materials to Avoid): None Hazardous Decomposition Products: None

Hazardous Polymerization: Will Not Occur

### **SECTION 7: CLEAN UP PROCEDURES**

### **Steps To Be Taken To Clean Up Dust Generated:**

Vacuum pick up of dust is recommended. A light spray of water may be used to minimize dust generation. Dispose in approved industrial waste container. **Waste Disposal Method:** Approved industrial waste disposal means.

### **SECTION 8: SPECIAL PROTECTION INFORMATION FOR MACHINING**

**Respiratory Protection (Specify Type):** Dust respirator in compliance with OSHA Standard currently 29 CFR 1910.134 (NIOSH approved, air purifying, half mask or full face-piece respirator with appropriate filter pad or cartridge(s)).

Ventilation: Local Exhaust: Follow OSHA Standard 29 CFR 1910.94. Mechanical (General): Follow OSHA Standard 29 CFR 1910.94.

### **SECTION 9: SPECIAL CONSIDERATIONS**

**Note** If the material is machined or if there is dust generated after 870°C, Silica can change crystal structure at elevated temperatures. Tridymite is formed at tempertures above 870°C and cristobalite is formed above 1470°C. Both of these materials have greater health hazards than quartz. Use appropriate NIOSH approved respirator in compliance with requirement 29 CFR 1910.134 if exposure exceeds PEL or TLV levels.

\*(Reference 1984-85 ACGIH TLV Booklet, Page 34). Appropriate ventilation should be provided and protective equipment should be worn in compliance with OSHA standard currently 29 CFR 1910.134 (NIOSH approved, air purifying, half mask or full face-piece respirator with appropriate filter pad or cartridge(s)).

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# MATERIAL SAFETY DATA SHEET COTRONICS ADHESIVES TRADE NAME

### 903 AC Grade Ceramic Adhesive

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

**SECTION ONE: Base Material** 

**Chemical Name And Synonyms:** N/A Mixture

Formula: N/A

Chemical Family: Refractory Ceramic Composition

**Comments:** N/A *Proprietary Phosphate, Alumina, Bond* 

### **SECTION 2: COMPOSITION INFORMATION**

 WT. %
 TVL/PEL
 CAS

 Phosphoric Acid
 9-15
 1 Mg/cm3
 7664-38-2

 Chromium Compounds
 >10
 0.5 Mg/cm3
 1308-38-9

 Refractory Ceramic
 >70%

All materials contained within are listed on the TSCA Inventory list. This product is compliant with the RoHS Directive.

### **SECTION 3: PHYSICAL DATA**

Boiling Point (°F): N/A
Specific Gravity Range (H2O = 1): 0.9 - 3.1
Vapor Pressure (mm Hg.): N/A
Vapor Density (Air=1): N/A
Percent Volatile By Volume (%): N/A
Solubility In Water: Soluble
Evaporation Rate (H2O=1): 1

Appearance/Odor: White or Tan Paste \*(903 Green=Green Paste) No Odor.

### **SECTION 4: FIRE AND EXPLOSION HAZARD DATA**

Extinguishing Media: N/A
Flash Point (Method Used): N/A
Flammable Limit: N/A
Unusual Fire and Explosive Hazards: Lel = N/A
Special Fire Fighting Procedures: Uel = N/A

### **SECTION 5: HEALTH HAZARD DATA**

**Effects of Overexposure:** Slight dermatological irritation after prolonged skin contact. **Emergency And First Aid Procedures:** Flush eyes and skin with copious quantities of water. Get immediate medical attention for eyes. If swallowed, consult physician immediately.

### **SECTION 6: FIRE, EXPLOSIVE AND REACTIVITY DATA**

Stability: Stable

Incompatibility (Materials to Avoid): Powdered aluminum metal

Hazardous Decomposition Products: None

Hazardous Polymerization: Will Not Occur.

### SECTION 7: SPILL OR LEAK PROCEDURES

Steps To Be Taken In Case Material Is Released Or Spilled: Sweep up spilled powder and dispose in approved industrial waste container. Hose spilled wet cement paste with water, immediately. Cement is not water soluble after setting up. Note Liquid is mild acid.

Waste Disposal Method: Approved industrial waste disposal means.

### SECTION 8: SPECIAL PROTECTION INFORMATION

**Respiratory Protection (Specify Type):** NIOSH approved\* respirators recommended for spray applications.

**Ventilation:** Local Exhaust: Vacuuming with the vacuum exhaust passing through a high efficiency particulate arresting (HEPA) filter is the exhaust is discharged into the workplace.

**Protective Gloves:** Recommended. **Eve Protection:** Recommended.

Other Protective Equipment: Rubber aprons, lab coats, etc. to protect clothing.

### **SECTION 9: SPECIAL PRECAUTIONS**

**Precautions To Be Taken In Handling And Storing:** Keep container closed and avoid getting wet until ready to use.

**Other Precautions:** Wash Hands Thoroughly Before Eating Or Smoking. Avoid Getting Powder In Body Openings, Including Cuts, Sores, Mouth, Etc.

\*(Reference 1984-85 ACGIH TLV Booklet, Page 34). Appropriate ventilation should be provided and protective equipment should be worn in compliance with OSHA standard currently 29 CFR 1910.134 (NIOSH approved, air purifying, half mask or full face-piece respirator with appropriate filter pad or cartridge(s)).

**Disclaimer:** The information in this document is believed to be correct as of this date. The person using this product assumes the risk of insuring the suitability of its use and safety.

DATE PREPARED: 11/01/85 DATE REVISED: 02/23/06

<sup>\*</sup>This product contains a chromium compound which is reportable under Section 313 of Title III of SARA and 40 CFR Part 372. For purposes of reporting environmental discharge, use 7% Chromium content.

### **MATERIAL SAFETY DATA SHEET COTRONICS ADHESIVES** TRADE NAME

903HP Ceramic Adhesive 903 Green Ceramic Adhesive\*

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

### **SECTION ONE:**

Chemical Name And Synonyms: N/A Mixture

Formula:

Chemical Family: Refractory Ceramic Composition

Comments:

Proprietary Silicate, Phosphate, Alumina, Bond

All materials contained within are listed on the TSCA inventory list.

This product is compliant with the RoHS Directive.

### **SECTION 2: COMPOSITION INFORMATION**

TVL/PEL A. All above WT. % CAS Phosphoric Acid >15 1 Mg/cm<sub>3</sub> 7664-38-2

B. 903 Green\* (Chromium Compounds are present only in 903 Green)

0.5 Mg/cm<sub>3</sub> Chromium Compounds >10 1308-38-9 All materials contained within are listed on the TOSCA Inventory list.

### **SECTION 3: PHYSICAL DATA**

Boiling Point (°F): N/A Specific Gravity Range (H2O = 1): 0.9 - 3.1Vapor Pressure (mm Hg.): N/A Vapor Density (Air=1): N/A Percent Volatile By Volume (%): N/A Solubility In Water: Soluble

Evaporation Rate (H2O=1):

Appearance/Odor: White or Tan Paste \*(903 Green=Green Paste) No Odor.

### **SECTION 4: FIRE AND EXPLOSION HAZARD DATA**

**Extinguishing Media:** N/A Flash Point (Method Used): N/A Flammable Limit: N/A Unusual Fire and Explosive Hazards: LEL= N/A Special Fire Fighting Procedures: UFI = N/A

### SECTION 5: HEALTH HAZARD DATA

Effects Of Overexposure: Slight dermatological irritation after prolonged skin contact. Emergency And First Aid Procedures: Flush eyes and skin with copious quantities of water. Get immediate medical attention for eyes. If swallowed, consult physician immediately.

### SECTION 6: FIRE, EXPLOSIVE AND REACTIVITY DATA

Stability: Stable

Incompatibility (Materials to Avoid): Powdered aluminum metal

**Hazardous Decomposition Products:** None

**Hazardous Polymerization:** Will Not Occur.

### **SECTION 7: SPILL OR LEAK PROCEDURES**

Steps To Be Taken In Case Material Is Released Or Spilled: Sweep up spilled powder and dispose in approved industrial waste container. Hose spilled wet cement paste with water, immediately. Cement is not water soluble after setting up. Note Liquid is mild acid.

Waste Disposal Method: Approved industrial waste disposal means.

### **SECTION 8: SPECIAL PROTECTION INFORMATION**

Respiratory Protection (Specify Type): NIOSH approved\* respirators recommended for spray applications.

Ventilation: Local Exhaust: Vacuuming with the vacuum exhaust passing through a high efficiency particulate arresting (HEPA) filter is the exhaust is discharged into the workplace.

Protective Gloves: Recommended. Eve Protection: Recommended.

Other Protective Equipment: Rubber aprons, lab coats, etc. to protect clothing.

### **SECTION 9: SPECIAL PRECAUTIONS**

Precautions To Be Taken In Handling And Storing: Keep container closed and avoid getting wet until ready to use.

Other Precautions: Wash Hands Thoroughly Before Eating Or Smoking. Avoid Getting Powder In Body Openings, Including Cuts, Sores, Mouth, Etc.

\*(Reference 1984-85 ACGIH TLV Booklet, Page 34). Appropriate ventilation should be provided and protective equipment should be worn in compliance with OSHA standard currently 29 CFR 1910.134 (NIOSH approved, air purifying, half mask or full face-piece respirator with appropriate filter pad or cartridge(s)).

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**DATE REVISED: 02/23/06** DATE PREPARED: 11/01/85

<sup>\*</sup>This product contains a chromium compound which is reportable under Section 313 of Title III of SARA and 40 CFR Part 372. For purposes of reporting environmental discharge, use 7% Chromium content.

# MATERIAL SAFETY DATA SHEET COTRONICS ADHESIVES TRADE NAME

903HP Ceramic Adhesive 904 HP Ceramic Adhesive

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

### **SECTION ONE:**

Chemical Name And Synonyms: N/A Mixture

Formula: N/A

Chemical Family: Refractory Ceramic Composition

Comments: N/A

Proprietary Phosphate, Alumina, Zirconia, Bond

### **SECTION 2: COMPOSITION INFORMATION**

A. All above WT. % TVL/PEL CAS
Phosphoric Acid >15 1 Mg/cm3 7664-38-2
All materials contained within are listed on the TSCA Inventory list.
This product is compliant with the RoHS Directive.

### **SECTION 3: PHYSICAL DATA**

Boiling Point (°F): N/A
Specific Gravity Range (H2O = 1): 0.9 - 3.1
Vapor Pressure (mm Hg.): N/A
Vapor Density (Air=1): N/A
Percent Volatile By Volume (%): N/A
Solubility In Water: Soluble
Evaporation Rate (H2O=1): 1

Appearance/Odor: White or Tan Paste/No Odor.

### **SECTION 4: FIRE AND EXPLOSION HAZARD DATA**

Extinguishing Media: N/A
Flash Point (Method Used): N/A
Flammable Limit: N/A
Unusual Fire and Explosive Hazards: Lel = N/A
Special Fire Fighting Procedures: Uel = N/A

### **SECTION 5: HEALTH HAZARD DATA**

**Effects of Overexposure:** Slight dermatological irritation after prolonged skin contact. **Emergency And First Aid Procedures:** Flush eyes and skin with copious quantities of water. Get immediate medical attention for eyes. If swallowed, consult physician immediately.

### SECTION 6: FIRE, EXPLOSIVE AND REACTIVITY DATA

Stability: Stable

Incompatibility (Materials to Avoid): Powdered aluminum metal

Hazardous Decomposition Products: None

Hazardous Polymerization: Will Not Occur.

### **SECTION 7: SPILL OR LEAK PROCEDURES**

Steps To Be Taken In Case Material Is Released Or Spilled: Sweep up spilled powder and dispose in approved industrial waste container. Hose spilled wet cement paste with water, immediately. Cement is not water soluble after setting up. Note Liquid is mild acid.

Waste Disposal Method: Approved industrial waste disposal means.

### **SECTION 8: SPECIAL PROTECTION INFORMATION**

**Respiratory Protection (Specify Type):** NIOSH approved\* respirators recommended for spray applications.

**Ventilation:** Local Exhaust: Vacuuming with the vacuum exhaust passing through a high efficiency particulate arresting (HEPA) filter is the exhaust is discharged into the workplace.

**Protective Gloves:** Recommended. **Eye Protection:** Recommended.

Other Protective Equipment: Rubber aprons, lab coats, etc. to protect clothing.

### **SECTION 9: SPECIAL PRECAUTIONS**

**Precautions To Be Taken In Handling And Storing:** Keep container closed and avoid getting wet until ready to use.

**Other Precautions:** Wash Hands Thoroughly Before Eating Or Smoking. Avoid Getting Powder In Body Openings, Including Cuts, Sores, Mouth, Etc.

\*(Reference 1984-85 ACGIH TLV Booklet, Page 34). Appropriate ventilation should be provided and protective equipment should be worn in compliance with OSHA standard currently 29 CFR 1910.134 (NIOSH approved, air purifying, half mask or full face-piece respirator with appropriate filter pad or cartridge(s)).

**Disclaimer:** The information in this document is believed to be correct as of this date. The person using this product assumes the risk of insuring the suitability of its use and safety.

DATE PREPARED: 11/01/85 DATE REVISED: 02/23/06

<sup>\*</sup>This product contains a chromium compound which is reportable under Section 313 of Title III of SARA and 40 CFR Part 372. For purposes of reporting environmental discharge, use 7% Chromium content.

## MATERIAL SAFETY DATA SHEET

## Cotronics Ceramic Adhesives Part A

905 Quartz Ceramic Adhesive 906 Magnesia Ceramic Adhesive 908 Alumina Ceramic Adhesive 908 Alumina Ceramic Adhesive 919 Zirconia Ceramic Adhesive

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

SECTION ONE:

Chemical Name And Synonyms: N/A Mixture

Chemical Family: Alumina, Quartz, Magnesia, Zirconia, or Silica.

Chemical Formula: N/A

Part A: Powder

Refractory Ceramic Composition (See Type Above) **Part B:** Liquid Binder or Water (See page 2)

Proprietary Silicate, Phosphate, Alumina, Zirconia, Colloid Bond

**SECTION 2: COMPOSITION INFORMATION** 

A. As Manufactured: WT. % TVL/PEL
Part A: Powder
Refractory Ceramic Powder 100 5 mg/ Cu M
Part B: Liquid Binder or Water
Refractory Ceramic Colloid 0 - 30 N/A
Water 0 - 100

B. After Normal Use See Section 8

All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

### **SECTION 3: PHYSICAL DATA**

	As Supplied	Cured
Boiling Point (°F):	212	N/A
Vapor Density (Air=1):	>1	N/A
Specific Gravity Range (H2O=1):	1.5 - 3	1.2 - 2.5
Percent Volatile By Volume:	20 - 50	N/A
(%) Solubility In Water:	Soluble	Insoluble
Evaporation Rate (H2O=1):	1	N/A
Appearance/Odor:	Creamy Paste/No Odor	Solid
Vapor Pressure (mm Hg.) :	0.2 - 1.2	N/A

### **SECTION 4: FIRE AND EXPLOSION HAZARD DATA**

Extinguishing Media: N/A
Flash Point (Method Used): N/A
Flammable Limit: N/A
Unusual Fire And Explosive Hazards: Lel = N/A
Special Fire Fighting Procedures: Uel = N/A

### **SECTION 5: HEALTH HAZARD DATA**

**Effects Of Overexposure:** Slight dermatological irritation after prolonged skin contact. *Emergency And First Aid Procedures:* Flush eyes and skin with copious quantities of water. Get immediate medical attention for eyes. If swallowed, consult physician immediately.

### **SECTION 6: FIRE, EXPLOSIVE AND REACTIVITY DATA**

Stability: Stable

Incompatibility (Materials to Avoid): Aluminum metal powder.

Hazardous Decomposition Products: None.

Hazardous Polymerization: Will Not Occur.

### **SECTION 7: SPILL OR LEAK PROCEDURES**

Steps To Be Taken In Case Material Is Released Or Spilled: Sweep up spilled powder and dispose in approved industrial waste container. Hose spilled wet cement paste with water, immediately. Cement is not water soluble after setting up. Note Liquid is mild acid.

Waste Disposal Method: Approved industrial waste disposal means.

### **SECTION 8: SPECIAL PROTECTION INFORMATION**

**Respiratory Protection (Specify Type):** NIOSH approved\* Respirators recommended for spray applications.

**Ventilation:** Local Exhaust: Vacuuming with the vacuum exhaust passing through a high efficiency particulate arresting (HEPA) filter is the exhaust is discharged into the workplace.

**Protective Gloves:** Recommended **Eve Protection:** Recommended

Other Protective Equipment: Rubber aprons, lab coats, etc. to protect clothing.

### **SECTION 9: SPECIAL PRECAUTIONS**

**Precautions To Be Taken In Handling and Storing:** Keep container closed and avoid getting wet until ready to use.

Other Precautions: Wash Hands Thoroughly Before Eating Or Smoking. Avoid Getting Powder In Body Openings, Including Cuts, Sores, Mouth, Etc.

\*(Reference 1984-85 ACGIH TLV Booklet, Page 34). Appropriate ventilation should be provided and protective equipment should be worn in compliance with OSHA standard currently 29 CFR 1910.134 (NIOSH approved, air purifying, half mask or full face-piece respirator with appropriate filter pad or cartridge(s)).

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DATE PREPARED: 11/01/85 DATE REVISED: 02/23/06

### MATERIAL SAFETY DATA SHEET RESBOND 907

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

**SECTION ONE: PRODUCT IDENTIFICATION** 

Chemical Name and Synonyms: N/A Mixture

Chemical Family: Aluminosilicate, Alumina, Silicate

Chemical Formula: N/A

Comments: See Section 9

**SECTION 2: COMPOSITION INFORMATION** 

A. As Manufactured: WT. %
Refractory Ceramics 50-70
Refractory Colloid\* 20-30
Water 10-20
B. After Normal Use See Section 8

This product is compliant with the RoHS Directive.

### **SECTION 3: PHYSICAL DATA**

	As Supplied	Cured
Boiling Point (°F):	212	N/A
Vapor Density (Air=1) :	>1	N/A
Specific Gravity Range (H2O = 1):	1	0.5 - 0.8
Percent Volatile by Volume:	70 - 80	N/A
(%) Solubility in Water:	Soluble	Insoluble
Evaporation Rate (H2O = 1):	1	N/A
Appearance and Odor:	Creamy Paste, No Odor.	Solid
Vapor Pressure (mm Hg.) :	17	N/A

### **SECTION 4: FIRE AND EXPLOSION HAZARD DATA**

Extinguishing Media: N/A
Flash Point (Method Used): N/A
Flammable Limit: N/A
Unusual Fire and Explosive Hazards: LEL = N/A
Special Fire Fighting Procedures: UEL= N/A

### **SECTION 5: HEALTH HAZARD DATA**

**Effects Of Overexposure:** Slight dermatological irritation after prolonged skin contact. Can be irritating to the eyes.

**Delayed Effects:** No known chronic hazards. Not listed by OSHA, NTP or IARC as a carcinogen.

DATE PREPARED: 11/01/85 DATE REVISED: 02/23/06

### **SECTION 6: EMERGENCY FIRST AID PROCEDURES**

**Emergency and First Aid Procedures:** Flush eyes and skin with copious quantities of water. Get immediate medical attention for eyes. If swallowed, consult physician immediately.

### **SECTION 7: FIRE, EXPLOSIVE AND REACTIVITY DATA**

Stability: Stable Hazardous Decomposition Products: None

Hazardous Polymerization: Will Not Occur

### **SECTION 8: SPILL OR LEAK PROCEDURES**

**Steps to be Taken in Case Material is Released or Spilled:** If spilled mix with water and dispose in approved industrial waste container. Hose spilled wet cement paste with water, immediately. Cement is not water soluble after setting up. **Waste Disposal Method:** Approved industrial waste disposal means.

**nsposar metriod:** Approved industrial waste disposar means.

### **SECTION 9: SPECIAL PROTECTION INFORMATION**

**Respiratory Protection (Specify Type):** NIOSH approved\* respirators recommended for spray applications.

**Ventilation:** Local Exhaust: Vacuuming with the vacuum exhaust passing through a high efficiency particulate arresting (HEPA) filter is the exhaust is discharged into the workplace.

**Protective Gloves:** Recommended **Eye Protection:** Recommended

Other Protective Equipment: Rubber aprons, lab coats, etc. to protect clothing.

### **SECTION 10: SPECIAL PRECAUTIONS**

### **Precautions To Be Taken In Handling and Storing:**

Keep container closed. Store away from excessive heat (eg. Steam pipes, radiators, from sources of ignition and from reactive materials).

**Other Precautions:** Wash hands thoroughly before eating or smoking. Avoid getting material in body openings including cuts, sores, mouth, etc.

### Precautions To Be Taken After Use And Upon Removal:

This product as manufactured contains an aluminosilicate which could transform upon heating to mullet and crystobalite (a form of crystalline silica). Removal of this product after use may result in the generation of dust. Repeated inhalation of respirable free crystalline silica dust may cause delayed lung injury (silicosis). The recommended TLV/PEL for free crystalline silica is derived from the formula: 10 mg/cu m

½(-----)#

% Respirable quartz + 2

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<sup>\* (</sup>Water Base)

<sup>\*(</sup>Reference 1984-85 ACGIH TLV Booklet, Page 34). Appropriate ventilation should be provided and protective equipment should be worn in compliance with OSHA standard currently 29 CFR 1910.134 (NIOSH approved, air purifying, half mask or full face-piece respirator with appropriate filter pad or cartridge(s)).

## MATERIAL SAFETY DATA SHEET TRADE NAME

Part B

905 Quartz Ceramic Adhesive 906 Magnesia Ceramic Adhesive 908 Alumina Ceramic Adhesive 908 Alumina Ceramic Adhesive 7030 Silica Ceramic Adhesive

919 Zirconia Ceramic Adhesive

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

### **SECTION ONE: PRODUCT IDENTIFICATION**

Chemical Name And Synonyms: N/A Mixture

Chemical Family: Alumina, Quartz, Magnesia, Zirconia, or Silica

**Chemical Family:** Refractory Ceramic Colloid Proprietary Silicate, Phosphate, Alumina, Zirconia, Colloid Bond.

### **SECTION 2: COMPOSITION INFORMATION**

As Manufactured:	WT. %	TVL/PEL
A. Liquid Binder or Thinner		
Refractory Ceramic Colloid	20 - 50	N/A
Water	50 - 80	
B. After Normal Use See Section 8		
C. Mist or Dried dust from spraying	30 - 50	10 mg/m <sup>3</sup>
(Not formed in normal use)		_
All A A A A A A A A A A A A A A A A A A		1 1 2

All Materials contained within are located on the TSCA Inventory List This product is compliant with the RoHS Directive.

### **SECTION 3: PHYSICAL DATA**

	As Supplied	As Cured
Boiling Point (§F):	212°F	N/A
Specific Gravity (H2O=1):	1.2 - 1.4	1.2-2.5
Vapor Pressure (mm Hg.):	0.2-1.2	N/A
Vapor Density (Air=1):	>1	N/A
Percent Volatile By Volume:	20-50	N/A
Solubility In Water:	Soluble	Insoluble
Evaporation Rate (H2O=1):	1	N/A
Appearance/Odor:	Clear or Opalescent liquid	Solid
	No Odor	No Odor

### **SECTION 4: FIRE AND EXPLOSION HAZARD DATA**

Extinguishing Media: N/A
Flash Point (Method Used): N/A
Flammable Limit: N/A
Unusual Fire and Explosive Hazards: LEL = N/A
Special Fire Fighting Procedures: UEL = N/A

### **SECTION 5: HEALTH HAZARD DATA**

**Primary Route Of Entry:** Inhalation, Ingestion, Eyes and Skin Irritation. **Effects Of Overexposure:** Long term overexposure to inhalation of mists or dust of dried down particles may cause tissue response in the lung (Pneumoconiosis). **Emergency & First Aid Procedures:** Terminate exposure. Flush eyes with water for

15 minutes. Call a doctor

**SECTION 6: FIRE, EXPLOSIVE AND REACTIVITY DATA** 

N/A

SECTION 7: SPILL OR LEAK PROCEDURES

Recommended Procedures: Routine Housekeeping

Waste Disposal Method: N/A

### SECTION 8: SPECIAL PROTECTION INFORMATION

**Respiratory Protection (Specify Type):** Respiratory protection is not normally needed since the volatility and toxicity are low. If significant mists or aerosols are generated, wear a NIOSH approved or equivalent respirator, (ANSI Z-88.2, 1980 for requirements and selection).

Ventilation: Local Exhaust: Follow OSHA Standard 29 CFR 1910.94. Mechanical (General): Follow OSHA Standard 29 CFR 1910.94.

Protective Gloves: Recommended.

Eye Protection: Goggles/Safety Glasses Recommended.

Other Protective Equipment: As required to meet applicable OSHA Standards .

### **SECTION 9: SPECIAL PRECAUTIONS**

Precautions To Be Taken After Use And Upon Removal: This product as manufactured may contain a Silicate. Which could transform upon heating to mullet and crystobalite (a form of crystalline silica). Removal of this product after use may result in the generation of dust. Repeated inhalation of respirable free crystalline silica dust may cause delayed lung injury (silicosis). The recommended TLV/PEL for free crystalline silica is derived from the formula: 10 mg/cu m

½(----)#
% Respirable quartz + 2

\*(Reference 1984-85 ACGIH TLV Booklet, Page 34). Appropriate ventilation should be provided and protective equipment should be worn in compliance with OSHA standard currently 29 CFR 1910.134 (NIOSH approved, air purifying, half mask or full face-piece respirator with appropriate filter pad or cartridge(s)).

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DATE PREPARED: 11/01/85 DATE REVISED: 02/23/06

### MATERIAL SAFETY DATA SHEET

### **RESBOND 907GF**

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

### **SECTION ONE: PRODUCT IDENTIFICATION**

**Chemical Name and Synonyms:** N/A Mixture

Chemical Family: Aluminosilicate, Alumina or Silicate

Chemical Formula: N/A

IN/A

Comments: See Section 9

### **SECTION 2: COMPOSITION INFORMATION**

Α.	As Manufactured:	WT. %	TVL/PEL

Refractory Ceramics 50-70 Refractory Colloid\* 20-30 Water 10-20

### B. After Normal Use See Section 8

All materials contained within are listed on the TSCA Inventory list. This product is compliant with the RoHS Directive.

### **SECTION 3: PHYSICAL DATA**

	As Supplied	Cured
Boiling Point (°F) :	212	N/A
Vapor Density (Air=1):	>1	N/A
Specific Gravity Range (H2O = 1):	1	0.5 - 0.8
Percent Volatile by Volume:	70 - 80	N/A
(%) Solubility in Water:	Soluble	Insoluble
Evaporation Rate (H2O = 1):	1	N/A
Appearance and Odor:	Creamy Paste No Odor.	Solid
Vapor Pressure (mm Hg.):	17	N/A
VOLATILE ORGANIC CONTENT	VOC = O	

Extinguishing Media: N/A
Flash Point (Method Used): N/A
Flammable Limit: N/A
Unusual Fire And Explosive Hazards: LEL = N/A
Special Fire Fighting Procedures: UEL= N/A

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SECTION 4: FIRE AND EXPLOSION HAZARD DATA

### **SECTION 5: HEALTH HAZARD DATA**

Primary Route Of Entry: Inhalation, Ingestion And Skin Irritation.

**Emergency and First Aid Procedures:** Flush eyes with copious quantities of water. Get immediate medical attention for eyes. If swallowed, consult a physician immediately. **Effects Of Overexposure:** 

Currently, studies have shown that signs of slight dermatological irritation have occurred after prolonged skin contact. This product contains minor amounts of binders which burn out during first heat up. Emergency and First Aid Procedures Terminate Exposure.

### **SECTION 6: FIRE, EXPLOSIVE AND REACTIVITY DATA**

N/A

**SECTION 7: SPILL OR LEAK PROCEDURES** 

Recommended Procedures: N/A

Waste Disposal Method: Routine Housekeeping

### **SECTION 8: SPECIAL PROTECTION INFORMATION**

Respiratory Protection (Specify Type) Dust respirator in compliance with OSHA Standard currently 29 CFR 1910.134 (NIOSH Approved, air purifying, half mask or full face-piece respirator with appropriate filter pad or cartridge(s)).

Ventilation: Local Exhaust: Follow OSHA Standard 29 CFR 1910.94 Mechanical (General): Follow OSHA Standard 29 CFR 1910.94

Protective Gloves: Recommended

Eye Protection: Goggles/Safety Glasses Recommended

Other Protective Equipment: Long Sleeve, Loose Fitting Clothing and Barrier Cream

Material does not appear on NTP and/or LAC lists of reports for Carcinogens

### **SECTION 9: SPECIAL PRECAUTIONS**

### Precautions To Be Taken During First Exposure To Heat:

Trace temporary organic binders will burn off during the first exposure to heat. (500 - 1000°F) carbon monoxide, carbon dioxide, oxides of nitrogen, reactive hydrocarbons and a small amount of formaldehyde may accompany binder burn-off. Use adequate ventilation or other precautions to eliminate vapors resulting from binder burn-off. Exposure to burn-off fumes may cause respiratory tract irritation.

### Precautions To Be Taken After Use And Upon Removal:

This product as manufactured contains an aluminosilicate which could transform upon heating to mullet and crystobalite (a form of crystalline silica). Removal of this product after use may result in the generation of dust. Repeated inhalation of respirable free crystalline silica dust may cause delayed lung injury (silicosis). The recommended TLV/PEL for free crystalline silica is derived from the formula: 10 mg/cu m

⁄<sub>2</sub>(-----)#

% Respirable quartz + 2

DATE PREPARED: 11/01/85 DATE REVISED: 02/23/06

<sup>\* (</sup>Water Base)

<sup>\*(</sup>Reference 1984-85 ACGIH TLV Booklet, Page 34). Appropriate ventilation should be provided and protective equipment should be worn in compliance with OSHA standard currently 29 CFR 1910.134 (NIOSH approved, air purifying, half mask or full face-piece respirator with appropriate filter pad or cartridge(s)).

# MATERIAL SAFETY DATA SHEET COTRONICS 907 TS THREADSEALER

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

**SECTION ONE** 

**Chemical Name and Synonyms:** N/A Mixture

Chemical Formula: Proprietary, Mixture Chemical Family: Modified Silicic Acid

### **SECTION 2: COMPOSITION INFORMATION**

Boiling Point:

Vapor Density(Air=1):

Solubility In Water:

Volatile (By Weight):

Specific Gravity (Water=1):

Vapor Pressure (mm Hg):

Melting Or Freezing Point:

N/A

N/A

N/A

Nolatile (N/A

N/A

Nolatile (N/A

Appearance Odor:

Solids Content:

30 - 50% By Weight Dispersed Solids

Evaporation Rate (Butyl Acetate=100, Non Aq. Liquids Only):

N/A

All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

### SECTION 3: FIRE AND EXPLOSION HAZARD DATA

Flash Point:
Auto Ignition Temp:
Lower Explosion Limit (%):
Upper Explosion Limit (%):
No Data
Extinguishing Media:
N/A

**SECTION 4: HEALTH HAZARD DATA** 

**Effects Of Overexposure:** 

Inhalation: Mist or vapor can irritate the nose and throat.

Eye Contact: Irritating to eyes.

**Skin Contact:** Substance is moderately irritating to the skin. **Ingestion:** Causes Irritation to esophagus and stomach.

Delayed Effects: No Known chronic hazards. Not listed by OSHA, NTP, or IARC as a

carcinogen.

**Physical Hazards:** Dries to form glassy film which can cut skin. Spills are slippery.

DATE PREPARED: 11/01/85 DATE REVISED: 02/23/06

### **SECTION 5: EMERGENCY AND FIRST AID PROCEDURES**

**Inhalation:** Move subject to fresh air. Give artificial respiration if breathing has stopped. **Eye And Skin Contact:** Flush eyes with a large amount of water for at least 15 minutes. Get prompt medical attention. Wash skin thoroughly with soap and water. Remove and wash clothing before reuse.

**Ingestion:** If swallowed dilute by giving 2 glasses of water to drink. See a physician. Never give anything by mouth to an unconscious person.

### **SECTION 6: REACTIVITY INFORMATION**

**Stability:** Stable. **Hazardous Polymerization:** Will not occur.

### **SECTION 7: SPILL OR LEAK PROCEDURES**

High pH of material can be harmful to aquatic life. If Spilled mix with water to neutralize fluid. If small quantity mop and flush to sewer with plenty of water. If large quantity isolate dike and store discharged material. Observe environmental protection regulations.

Waste Disposal Methods: Neutralize with dilute acid and landfill solids according to local state, and federal regulations, Flush neutral liquid to sewer with plenty of water.

### SECTION 8: SPECIAL PROTECTION INFORMATION

**Ventilation Type:** Normal room ventilation.

**Respiratory Protection:** None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH approved or equivalent) suitable for concentrations and types of air contaminants encountered.

Protective Gloves: Impervious.

**Eye Protection:** Chemical splash goggles(ANSI Z-871 or approved equivalent).

Other Protective Equipment: Eyewash facility.

### **SECTION 9: SPECIAL PRECAUTIONS**

Store away from excessive heat (e.g., steam-pipes, radiators, from sources of ignition, and from reactive materials). Do not store near food or feed. Corrosive to copper and brass on long storage.

Corrosive Material: Avoid all eye and skin contact.

*Misc Info:* The use of this and auxiliary materials should be confined to designated work areas. Emptied containers may still contain hazardous residues.

### Precautions To Be Taken After Use And Upon Removal:

This product as manufactured contains an aluminosilicate which could transform upon heating to mullet and crystobalite (a form of crystalline silica). Removal of this product after use may result in the generation of dust. Repeated inhalation of respirable free crystalline silica dust may cause delayed lung injury (silicosis). The recommended TLV/PEL for free crystalline silica is derived from the formula: 10 mg/cu m

½(----)#
% Respirable quartz + 2

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## COTRONICS CORPORATION MATERIAL SAFETY DATA SHEET

### **RESCOR 916 BORON NITRIDE**

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

### **SECTION ONE:**

Chemical Name and Synonyms: Boron Nitride

Formula: BN
Chemical Family: Refract
Comments: N/A
This product is compliant with the RoHS Directive.

### **SECTION 2: COMPOSITION INFORMATION**

	<b>U_U:</b> U: U: U:		,
Component	CAS # WT.	% ACGIH (TVL)	OSHA (PEL)
Boron Nitride	10043-11-5 >95 %	10 Total	15 mg/m <sup>3</sup> Total
			5 mg/m <sup>3</sup> Respirable
Boric Oxide	1303-86-2 < 5 %	10 Total	15 mg/m <sup>3</sup> Total
			5 mg/m <sup>3</sup> Respirable

### **SECTION 3: PHYSICAL DATA**

Boiling Point (°F): N/A
Specific Gravity Range (H2O=1): 0.3 -2.2
Vapor Pressure (mm Hg.): N/A
Vapor Density (Air=1): N/A
Percent Volatile By Volume (%): N/A
Solubility In Water: N/A

Solubility In Water: Insoluble Evaporation Rate (=1): N/A

Appearance/Odor: Machinable Solid Ceramic Rods, Plates Bars

No Odor

### **SECTION 4: FIRE AND EXPLOSION HAZARD DATA**

Extinguishing Media: N/A Flash Point (method Used) : N/A Flammable Limit: N/A Unusual Fire and Explosive Hazards: LEL = N/A Special Fire Fighting Procedures: UEL = N/A

Product is non flammable Product in or near fire should be cooled with a water spray or fog. A self contained breathing apparatus and full fire fighting protective equipment should be worn for combating all fires.

### **SECTION 5: HEALTH HAZARD DATA**

**Effects Of Overexposure:** Product is opaque white shapes with no odor. Dusts may cause eye, skin and respiratory tract irritation. Wear appropriate protective equipment.

Threshold Limit Value: None.

**Emergency And First Aid Procedures:** Keep individuals not involved in the appropriate containers for reuse or disposal. Product is inert and is not expected to present an up out of the area.

**Chronic and Carcinogenicity:** Prolonged exposure to high concentrations of the product may cause a benign pneumoconiosis The product is not known to be a carcinogen or suspected carcinogen. May aggravate pre existing lung and skin disorders.

### **SECTION 6: EMERGENCY AND FIRST AID PROCEDURES**

**Inhalation:** Move subject to fresh air. Give artificial respiration if breathing has stopped. **Eyes:** Flush with tepid water for at least 20 minutes holding eyelids wide open. Seek medical attention if irritation develops.

**Skin Contact:** Wash skin thoroughly with soap and water. Remove and wash clothing before reuse.

*Ingestion:* Not expected to be important route of entry into the body. See a physician. Never give anything by mouth to an unconscious person.

### **SECTION 7: FIRE, EXPLOSIVE AND REACTIVITY DATA**

Stability: Stable

Incompatibility (Materials to Avoid): Strong Oxidizing Agents

Hazardous Decomposition Products: None that are known (stable to 3000°F)

Hazardous Polymerization: Will Not Occur

### **SECTION 8: SPILL OR LEAK PROCEDURES**

**Steps To Be Taken In Case Material Is Released or Spilled:** Pick up with suitable implements and return to original or other appropriate container. If not reusable place in DOT containers for disposal. **Waste Disposal Method:** Approved industrial waste disposal means. Product is considered to be non hazardous.

### **SECTION 9: SPECIAL PROTECTION INFORMATION**

**Respiratory Protection (Specify Type):** Dust respirator in compliance with OSHA Standard currently 29 CFR 1910.134 (NIOSH approved, air purifying, half mask or full face-piece respirator with appropriate filter pad or cartridge(s)).

Ventilation: Local Exhaust: Follow OSHA Standard 29 CFR 1910.94. Mechanical (General): Follow OSHA Standard 29 CFR 1910.94.

**Toxicological Information** Soluble Boron Nitride compounds are known to have a toxic effect on the central nervous system at high exposure levels. The Boron Compounds present in this product are present in a insoluble inert matrix and are not expected to be bio-available.

\*(Reference 1984-85 ACGIH TLV Booklet, Page 34). Appropriate ventilation should be provided and protective equipment should be worn in compliance with OSHA standard currently 29 CFR 1910.134 (NIOSH approved, air purifying, half mask or full face-piece respirator with appropriate filter pad or cartridge(s)).

**DISCLAIMER:** The information supplied is not to be taken as a warranty or representation for which Cotronics Corp. assumes legal responsibility. It is offered solely for your consideration, investigation and verification. all risk of use, singly or in combination with other products, whether or not in accordance with the instructions, directions, or suggestions is borne by the user.

DATE PREPARED: 11/01/85 DATE REVISED: 02/23/06

# MATERIAL SAFETY DATA SHEET COTRONICS CORPORATION 918 Ceramic Adhesive

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

**SECTION 1: PRODUCT IDENTIFICATION** 

Chemical Name: N/A Mixture

Formula: N/A

Comments: Proprietary Alumina, Silicate Bond

**SECTION 2: COMPOSITION INFORMATION** 

 Chemical:
 CAS #:
 TLV (TWA) :
 PEL:
 Wt %

 Silica (Hazardous)
 14808-60-7
 .1 mg/m3
 .1 mg/m3
 < 20 %</td>

Other Mixed Ceramic Oxides

(Respirable Nuisance Dust): N/A 5.0 mg/m3 10 mg/m3 < 85 %

\*Note silica is listed on IARC as a carcinogen.

This product is compliant with the RoHS Directive.

DOT I.D. Number: Not Regulated.

#### SECTION 3: PHYSICAL PROPERTY INFORMATION

Appearance/Odor: White Powder/No odor

Melting/Freezing Point:

% Volatile (By Volume):

N/A

Boiling Point:

N/A

Specific Gravity (Water=1):

Vapor Pressure (mm Hg):

Evaporation Rate:

N/A

N/A

N/A

Solubility In Water: Less than 15%

### **SECTION 4: FIRE AND EXPLOSION HAZARD DATA**

Flash Point: N/A
Auto Ignition Temp: N/A
Lower Explosion Limit (%): N/A
Upper Explosion Limit (%): N/A
Special Fire Fighting Procedures: N/A
Unusual Fire and Explosion Hazards: N/A

**Extinguishing Media:** Water, Carbon Dioxide, Dry Chemical, and

Foam

DATE PREPARED: 11/01/85 DATE REVISED: 02/23/06

#### SECTION 5: EMERGENCY AND FIRST AID PROCEDURES

**Overexposure:** Slight dermatological irritation after prolonged skin contact. **Eye and Skin Contact:** Flush eyes with a copious amount of water. Get immediate attention for eyes. Wash skin thoroughly with soap and water. Remove and wash clothing before reuse.

**Ingestion:** If swallowed consult physician immediately.

### **SECTION 6: FIRE, EXPLOSIVE AND REACTIVITY DATA**

**Stability:** Stable **Hazardous Decomposition Products:** None

Hazardous Polymerization: Will not occur

Conditions To Avoid: N/A

### SECTION 7: SPILL OR LEAK PROCEDURES

**Steps to be Taken if Material Is Released or Spilled:** Sweep up spilled powder and dispose (see below). Respiratory protection should be worn\*\*. Flush residue with water and dispose. **Waste Disposal Methods:** Material can be disposed of in landfill solids according to local state and federal regulations.

### **SECTION 8: SPECIAL PROTECTION INFORMATION**

**Ventilation Type:** Local Exhaust: Vacuuming with the vacuum exhaust passing

through a high efficiency particulate arresting (HEPA) filter.

Respiratory Protection: NIOSH approved\*

Protective Gloves: Recommended. Eye Protection: Recommended.

Other Protective Equipment: Rubber Aprons or Lab Coats to protect clothing.

### **SECTION 9: SPECIAL PRECAUTIONS**

Keep Container Closed. Keep Product From Moisture Prior To Use.

Other Precautions: Wash hands thoroughly before eating or smoking. Avoid getting powder in body openings, including cuts, sores, mouth, etc.

Precautions To Be Taken After Use And Upon Removal:

This product as manufactured contains an aluminosilicate which could transform upon heating to mullet and crystobalite (a form of crystalline silica). Removal of this product after use may result in the generation of dust. Repeated inhalation of respirable free crystalline silica dust may cause delayed lung injury (silicosis). The recommended TLV/PEL for free crystalline silica is derived from the formula: 10 mg/cu m

1/2(-----)#

% Respirable quartz + 2

\*\*(Reference 1984-85 ACGIH TLV Booklet, page 34). Appropriate ventilation should be provided and protective equipment should be worn in compliance with OSHA standard currently 29 CFR 1910.134 (NIOSH approved, air purifying, half mask or full face-piece respirator with appropriate filter pad of cartridge(s)).

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<sup>\*\*</sup>ACGIH TLV Booklet (see below).

<sup>\*</sup>All materials contained are listed on the EPA TSCA Inventory List.

## PROPRIETARY MATERIAL SAFETY DATA SHEET COTRONICS CORPORATION

### 920 Ceramic Adhesive

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

### SECTION ONE:

Chemical Name: N/A Mixture

Formula: N/A

**Comments:** Proprietary Phosphate, Alumina Bond

### **SECTION 2: COMPOSITION INFORMATION**

Chemical:	CAS #:	TLV (TWA) :	PEL:	WT%:
Alumina Oxide	1344-28-1	10 mg/m3	5 mg/m3	<90
Other Mixed Ceramic Oxid	es	-	-	
(Respirable Nuisance Dust	t) N/A	10 mg/m3	5 mg/m3	<20

<sup>\*\*</sup>ACGIH TLV Booklet (See Below).

This product is compliant with the RoHS Directive.

DOT I.D Number: Not Regulated.

### SECTION 3: PHYSICAL PROPERTY INFORMATION

Appearance/Odor: White Powder/No Odor

Melting/Freezing Point: N/A
% Volatile (By Volume): N/A
Boiling Point: N/A
Specific Gravity (Water=1): 1.5 - 2.5
Vapor Pressure (mm Hg): N/A
Evaporation Rate: N/A
Vapor Density (Air=1): N/A

**Solubility In Water:** Less than 10%

### **SECTION 4: FIRE AND EXPLOSION HAZARD DATA**

Flash Point: N/A
Auto Ignition Temp: N/A
Lower Explosion Limit (%): N/A
Upper Explosion Limit (%): N/A
Extinguishing Media: N/A
Special Fire Fighting Procedures: N/A
Unusual Fire and Explosion Hazards: N/A

### SECTION 5: EMERGENCY AND FIRST AID PROCEDURES

**Overexposure:** Slight dermatological irritation after prolonged skin contact. **Eye and Skin Contact:** Flush eyes with a copious amount of water. Get immediate attention for eyes. Wash skin thoroughly with soap and water. Remove and wash clothing before reuse.

*Ingestion:* If swallowed, consult physician immediately.

### **SECTION 6: FIRE, EXPLOSIVE AND REACTIVITY DATA**

Stability: Stable Hazardous Decomposition Products: None

Hazardous Polymerization: Will not occur

Conditions To Avoid: N/A

### **SECTION 7: SPILL OR LEAK PROCEDURES**

**Steps To Be Taken If Material Is Released Or Spilled:** Sweep up spilled powder and dispose (see below). Respiratory protection should be worn\*\*. Flush residue with water and dispose.

**Waste Disposal Methods:** Material can be disposed of in landfill solids according to local state and federal regulations.

### **SECTION 8: SPECIAL PROTECTION INFORMATION**

Ventilation Type: Local Exhaust: Vacuuming with the vacuum exhaust passing

through a high efficiency particulate arresting (HEPA) filter.

Respiratory Protection: NIOSH approved\*.

**Protective Gloves:** Recommended. **Eye Protection:** Recommended.

Other Protective Equipment: Rubber Aprons or Lab Coats to protect clothing.

### **SECTION 9: SPECIAL PRECAUTIONS**

Keep container closed. Keep product from moisture prior to use.

Other Precautions: Wash hands thoroughly before eating or smoking. Avoid getting powder in body openings, including cuts, sores, mouth, etc.

\*\*(Reference 1984-85 ACGIH TLV Booklet, page 34). Appropriate ventilation should be provided and protective equipment should be worn in compliance with OSHA standard currently 29 CFR 1910.134 (NIOSH approved, air purifying, half mask or full face piece respirator with appropriate filter pad of cartridge (s)).

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DATE PREPARED: 11/01/85 DATE REVISED: 02/23/06

<sup>\*</sup>All materials contained are listed on the EPA TSCA Inventory List.

## MATERIAL SAFETY DATA SHEET COTRONICS CORPORATION

931 Graphite Adhesive 931 Adhesive Powder 931 Thinner Binder

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996 This product is compliant with the RoHS Directive.

**SECTION ONE:** 

**Chemical Name and Synonyms:** N/A Mixture

Formula: N/A

**Chemical Family:** Proprietary Graphite Adhesive

Comments: N/A

**SECTION 2: COMPOSITION INFORMATION** 

Liquid:

**Appearance Odor:** Clear and colorless; pungent odor.

**Melting Or Freezing Point:** No data.

**Boiling Point:** 170øC @ 750 mm.

Vapor Pressure (mm Hg): 1 mm @ 32øC.

% Volatile By Volume:
Vapor Density (Air=1):
Solubility In Water:
Specific Gravity (Water=1):
Evaporation Rate (=1):

N/A.

N/A.

Powder:

Boiling Point (ØF): N/A.

Specific Gravity (H2O=1): >1.

Vapor Pressure (mm Hg.): N/A.

% Volatile By Volume: N/A.

Vapor Density (Air=1): N/A.

Evaporation Rate (=1): N/A.

Solubility In Water: Insoluble.

**SECTION 3: HAZARD INGREDIENTS** 

**Material:** Liquid Thinner CAS #: TLV: %: Furfuryl Alcohol 98-00-0 >85 10 ppm *Material:* Graphite Adhesive Graphite Resin 7782-42-5 >60 10 mg/m3 Phenolic Resin 9003-35-4 < 20 N/A Formaldehyde 50-00-0 < 0.015 1 ppm

**SECTION 4: FIRE AND EXPLOSION HAZARD DATA** 

Flash Point (Method Used) : 167 ØF (Open Cup). Flammable Limits % By Volume: LEL = 1.8 UEL = 16.3.

**Extinguishing Media:** Dry Chemical, C02, Water, Foam.

**Special Fire Fighting Procedures:** Wear Self Contained Breathing Apparatus. **Unusual Fire And Explosion Hazards:** Moderate fire hazard when exposed to heat and react with oxidizing materials. Fire can generate hazardous pitch and a phenol vapors.

**SECTION 5: HEALTH HAZARD DATA** 

Liquid:

Threshold Limit Value: 5 ppm

*Effects Of Overexposure:* Toxic when ingested, inhaled or absorbed through the skin.

Emergency And First Aid Procedures: If ingested, induce vomiting and call

physician.

**Eye And Skin Contact:** Flush with water for 15 minutes. Get prompt medical attention. Wash exposed skin thoroughly with soap and water. Remove and wash clothing before

reuse. Powder:

Threshold Limit Value: 1 ppm

Effects Of Overexposure: Contains formaldehyde which can cause cancer in

laboratory animals. Powder is a skin and eye irritant. There is minimum risk when used

with proper ventilation.

**Emergency And First Aid Procedure:** Follow above procedure.

**SECTION 6: REACTIVITY DATA** 

Stability: Stable.

**Conditions To Avoid:** Avoid contact with strong acids or oxidants.

**Compatibility (Materials to Avoid):** Reacts violently with strong acids.

Hazardous Decomposition Products: C0 and C02 Phenol vapors and pitch fumes.

SECTION 7: SPILL OR LEAK PROCEDURES

Dike and absorb spill on inert material (sand, earth, etc.). Transfer diking material to containers for disposal. Wear protective clothing. Use breathing apparatus (MSHA/NIOSH approved, pressure-demand, self-contained) or air mask for large spills in confined area. Wash clothing before reuse. Destroy clothing that cannot be decontaminated (i.e. Shoes).

**Waste Disposal Methods:** Incinerate liquid in approved equipment. Landfill or incinerate contaminated diking material in accordance with local, state and federal regulations.

**SECTION 8: SPECIAL PROTECTION INFORMATION** 

**Ventilation Type:** Normal room ventilation.

**Respiratory Protection:** None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH approved or equivalent) suitable for concentrations and types of air contaminants encountered.

Protective Gloves: Impervious.

Eye Protection: Chemical splash goggles(ANSI Z-871 or approved equivalent).

Other Protective Equipment: Eyewash facility.

**SECTION 9: SPECIAL PRECAUTIONS** 

**Handling And Storage:** Avoid contact with skin or eyes; do not breathe vapors. Use only with adequate ventilation do not exceed established OSHA exposure limits for furfuryl alcohol. Do not take internally.

**Other Precautions:** This material is combustible do not use or store near heat, sparks or open flames.

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DATE PREPARED: 11/01/85 DATE REVISED: 02/23/06

## MATERIAL SAFETY DATA SHEET COTRONICS CORPORATION

### 931C Graphite Adhesive

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996 This product is compliant with the RoHS Directive.

**SECTION ONE: PRODUCT IDENTIFICATION** 

Chemical Name And Synonyms: N/A Mixture

Formula: N/A

Chemical Family: Refractory Ceramic Composition, Proprietary Silicate

bond

**SECTION 2: COMPOSITION INFORMATION** 

Boiling Point (∅F): N/A
Specific Gravity (H2O=1): 1.3 - 1.5
Vapor Pressure (mm Hg.): N/A
% Volatile By Volume: N/A
Vapor Density (Air=1): N/A
Evaporation Rate (=1): N/A
Solubility In Water: N/A
Insoluble

Appearance & Odor: Smooth Creamy Grey Liquid. No Odor.

**SECTION 3: HAZARDOUS INGREDIENTS** 

**A.** As Manufactured WT %: TLV/PEL

Graphite (CAS #7782-42-5) <40% 5 mg/cu m\*

B. After Normal Use See Section One

\*(1984-85 ACGIH TLV Booklet Page 50).

**SECTION 4: FIRE AND EXPLOSION HAZARD DATA** 

Flash Point (Method Used): N/A

Flammable Limits % By Volume: LEL = N/A UEL = N/A

**Extinguishing Media:** Dry Chemical, C02, Water, Foam.

Special Fire Fighting Procedures: N/A

**SECTION 5: HEALTH HAZARD DATA** 

Emergency and First Aid Procedures:

**Eye and Skin Contact:** Flush with water for 15 minutes.get prompt medical attention. Wash exposed skin thoroughly with soap and water. Remove and wash clothing before re-use. If swallowed consult physician immediately.

Effects Of Overexposure:

Slight dermatological irritation after prolonged skin contact.

**SECTION 6: REACTIVITY DATA** 

Stability: Stable.

Compatibility (Materials to Avoid): Powdered Aluminum Metal

Hazardous Decomposition Products: CO and Co2 Hazardous Polymerization: Will not occur.

### **SECTION 7: SPILL OR LEAK PROCEDURES**

Dike and absorb spill on inert material (sand, earth, etc.). Transfer diking material to containers for disposal. Wear protective clothing. Use breathing apparatus (MSHA/NIOSH approved, pressure-demand, self-contained) or air mask for large spills in confined area. Wash clothing before reuse.

**Waste Disposal Methods:** Incinerate liquid in approved equipment. Landfill or incinerate contaminated diking material in accordance with local, state and federal regulations.

### **SECTION 8: SPECIAL PROTECTION INFORMATION**

**Ventilation Type:** Local exhaust Vacuuming with the vacuum exhaust passing through a high efficiency particulate arresting (HEPA) filter if the exhaust is discharges into the workplace.

**Respiratory Protection:** . Wear respirator (MSHA/NIOSH approved or equivalent) suitable for concentrations and types of air contaminants encountered.

Protective Gloves: Impervious.

**Eye Protection:** Chemical splash goggles(ANSI Z-871 or approved equivalent).

Other Protective Equipment: Eyewash facility.

### **SECTION 9: SPECIAL PRECAUTIONS**

**Handling And Storage:** Avoid contact with skin or eyes. Use only with adequate ventilation . Do not take internally.

Other Precautions: Wash hands thoroughly before eating or smoking avoid getting powder in body openings including cuts, sores, mouth, etc.

Precautions To Be Taken After Use And Upon Removal: This product as manufactured may contain a Silicate. Which could transform upon heating to mullet and crystobalite (a form of crystalline silica). Removal of this product after use may result in the generation of dust. Repeated inhalation of respirable free crystalline silica dust may cause delayed lung injury (silicosis). The recommended TLV/PEL for free crystalline silica is derived from the formula: 10 mg/cu m

½(-----)#

% Respirable quartz + 2

\*(Reference 1984-85 ACGIH TLV Booklet, page 34). Appropriate ventilation should be provided and protective equipment should be worn in compliance with OSHA standard currently 29 CRF 1910.134(NIOSH approved, air purifying half mask or full face-piece respirator with appropriate filter pad or cartridge(s)).

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DATE PREPARED: 5/11/92 DATE REVISED: 02/23/06

### PROPRIETARY MATERIAL SAFETY DATA SHEET COTRONICS CORPORATION

#### 931P Graphite Putty

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996 This product is compliant with the RoHS Directive.

**SECTION ONE: PRODUCT IDENTIFICATION** 

**Chemical Name and Synonyms:** N/A Mixture

Formula: N/A

**Chemical Family:** Proprietary Graphite Adhesive Silicate Bond

**SECTION 2: HAZARD INGREDIENTS** 

CAS #: %: TLV\*

Graphite 7782-42-5 25-35 10 mg/m<sup>3</sup>

**SECTION 3: PHYSICAL PROPERTY INFORMATION** 

Appearance/Odor: Grey Putty. No odor.

Melting or Freezing Point: N/A

**Boiling Point:** 170 ØC @ 750 mm.

Vapor Pressure (mm Hg): 1 mm @ 32øC.

% Volatile By Volume: N/A.
Vapor Density (Air=1): N/A.
Solubility In Water: Soluble.

Specific Gravity (Water=1): 1.4-1.6 Evaporation Rate (=1): N/A.

**SECTION 4: FIRE AND EXPLOSION HAZARD DATA** 

Flash Point (Method Used): 167øF (Open Cup).

Flammable Limits % By Volume: LEL = 1.8

UEL = 16.3

**Extinguishing Media:** Dry Chemical, C02, Water, Foam.

**Special Fire Fighting Procedures:** Wear Self Contained Breathing Apparatus. **Unusual Fire And Explosion Hazards:** Moderate fire hazard when exposed to heat and react with oxidizing materials. Fire can generate a hazardous pitch and phenol

vapors.

#### **SECTION 5: HEALTH HAZARD DATA**

#### Emergency and First Aid Procedures:

**Eye and Skin Contact:** Flush with water for 15 minutes. Get prompt medical attention. Wash exposed skin thoroughly with soap and water. Remove and wash clothing before re-use.

*Ingestion* If swallowed consult physician immediately.

#### Effects Of Overexposure:

Slight dermatological irritation after prolonged skin contact.

#### **SECTION 6: REACTIVITY DATA**

Stability: Stable.

**Conditions To Avoid:** Avoid contact with strong acids or oxidants.

Compatibility (Materials to Avoid): Reacts violently with strong acids.

Hazardous Decomposition Products: C0 and C02 Phenol vapors and pitch fumes.

#### SECTION 7: SPILL OR LEAK PROCEDURES

Dike and absorb spill on inert material (sand, earth, etc.). Transfer diking material to containers for disposal. Wear protective clothing. Use breathing apparatus (MSHA/NIOSH approved, pressure-demand, self-contained) or air mask for large spills in confined area. Wash clothing before reuse. Destroy clothing that cannot be decontaminated (i.e. Shoes).

**Waste Disposal Methods:** Incinerate liquid in approved equipment. Landfill or incinerate contaminated diking material in accordance with local, state and federal regulations.

#### **SECTION 8: SPECIAL PROTECTION INFORMATION**

**Ventilation Type:** Normal room ventilation.

**Respiratory Protection:** None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH approved or equivalent) suitable for concentrations and types

of air contaminants encountered. **Protective Gloves:** Impervious.

Eye Protection: Chemical splash goggles(ANSI Z-871 or approved equivalent).

Other Protective Equipment: Eyewash facility.

#### **SECTION 9: SPECIAL PRECAUTIONS**

**Handling And Storage:** Avoid contact with skin or eyes . Use only with adequate ventilation . Do not take internally.

Other Precautions: Wash hands thoroughly before eating or smoking avoid getting powder in body openings including cuts, sores, mouth, etc.

**Precautions To Be Taken After Use And Upon Removal:** This product as manufactured may contain a Silicate. Which could transform upon heating to mullet and crystobalite (a form of crystalline silica). Removal of this product after use may result in the generation of dust. Repeated inhalation of respirable free crystalline silica dust may cause delayed lung injury (silicosis). The recommended TLV/PEL for free crystalline silica is derived from the formula: 10 mg/cu m

½(-----)#
% Respirable quartz + 2

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DATE PREPARED: 5/11/92 DATE REVISED: 02/23/06

HIMS RATING Health = 1 Fire = 0 Reactivity = 0 HAZARD RATING: 0 = Insignificant 1 = Non-Toxic, Slight 2 = Moderate 3 = High 4 = Extreme

## MATERIAL SAFETY DATA SHEET Cotronics Ceramic Adhesives

Resbond 940 Zirconia Ceramic Adhesive Resbond 940HT Alumina Ceramic Adhesive Resbond 940LE Silica Ceramic Adhesive Resbond 940HE High Expansion Adhesive Resbond 940SS Stainless Steel Part 1 BASE (POWDER)

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

#### **SECTION ONE:**

**Chemical Name And Synonyms:** N/A Mixture

**Chemical Family:** Alumina, Zirconia or Silica

Chemical Formula: N/A

Part A: Powder

Refractory Ceramic Composition (Aluminum, Zirconia, Stainless 316 or Silica)

Part B: Liquid Binder or Water (See page 2)

Proprietary Silicate, Alumina, Zirconia, Colloid Bond

#### **SECTION 2: COMPOSITION INFORMATION**

A. As Manufactured:	WT. %	TVL/PEL
Part A: Powder		
Refractory Ceramic Powder	100	5 mg/ Cu M
940SS 316 Stainless Steel (Alloy)	Fe 7439-89-6	90 -100 (total
	Mo 7439-98-7	alloy content)
	Ch 7440-47-3	
	Ni 7440-02-0	
Part B: Liquid Binder or Water		
Refractory Ceramic Colloid	0 - 30	N/A
Water	0 - 100	

B. After Normal Use See Section 8

All materials contained within are listed on the TSCA Inventory list. This product is compliant with the RoHS Directive.

#### **SECTION 3: PHYSICAL DATA**

	As Supplied	Cured
Boiling Point (°F) :	212	N/A
Vapor Density (Air=1):	>1	N/A
Specific Gravity Range (H2O=1):	1.5 - 3	1.2 - 2.5
Percent Volatile By Volume:	20 - 50	N/A
(%) Solubility In Water:	Soluble	Insoluble
Evaporation Rate (H2O=1):	1	N/A
Appearance/Odor:	Creamy Paste/No C	dor Solid
Vapor Pressure (mm Hg.) :	0.2 - 1.2	N/A

#### **SECTION 4: FIRE AND EXPLOSION HAZARD DATA**

Extinguishing Media: N/A Flash Point (Method Used): N/A

#### **SECTION 5: HEALTH HAZARD DATA**

**Effects Of Overexposure:** Slight dermatological irritation after prolonged skin contact. *Emergency And First Aid Procedures:* Flush eyes and skin with copious quantities of water. Get immediate medical attention for eyes. If swallowed, consult physician immediately.

#### **SECTION 6: FIRE, EXPLOSIVE AND REACTIVITY DATA**

Stability: Stable

Incompatibility (Materials to Avoid): Aluminum metal powder.

Hazardous Decomposition Products: None.

Hazardous Polymerization: Will Not Occur.

#### **SECTION 7: SPILL OR LEAK PROCEDURES**

Steps To Be Taken In Case Material Is Released Or Spilled: Sweep up spilled powder and dispose in approved industrial waste container. Hose spilled wet cement paste with water, immediately. Cement is not water soluble after setting up. Note Liquid is mild acid.

Waste Disposal Method: Approved industrial waste disposal means.

#### **SECTION 8: SPECIAL PROTECTION INFORMATION**

**Respiratory Protection (Specify Type):** NIOSH approved\* Respirators recommended for spray applications.

**Ventilation:** Local Exhaust: Vacuuming with the vacuum exhaust passing through a high efficiency particulate arresting (HEPA) filter is the exhaust is discharged into the workplace.

Protective Gloves: Recommended Eve Protection: Recommended

Other Protective Equipment: Rubber aprons, lab coats, etc. to protect clothing.

#### **SECTION 9: SPECIAL PRECAUTIONS**

**Precautions To Be Taken In Handling And Storing:** Keep container closed and avoid getting wet until ready to use.

Other Precautions: Wash Hands Thoroughly Before Eating Or Smoking. Avoid Getting Powder In Body Openings, Including Cuts, Sores, Mouth, Etc.

\*(Reference 1984-85 ACGIH TLV Booklet, Page 34). Appropriate ventilation should be provided and protective equipment should be worn in compliance with OSHA standard currently 29 CFR 1910.134 (NIOSH approved, air purifying, half mask or full face-piece respirator with appropriate filter pad or cartridge(s)).

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DATE PREPARED: 11/01/85 DATE REVISED: 02/23/06

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## MATERIAL SAFETY DATA SHEET TRADE NAME

#### Resbond 940 940HT 940LE 940HE 940SS

#### Part 2 ACTIVATOR (LIQUID)

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

#### SECTION ONE: PRODUCT IDENTIFICATION

Chemical Name And Synonyms: N/A Mixture

Chemical Family: Alumina, Quartz, Zirconia, or Silica

Chemical Family: Refractory Ceramic Colloid, Proprietary Silicate,

Colloid Bond.

#### **SECTION 2: COMPOSITION INFORMATION**

	As Manufactured:	WT. %	TVL/PEL
A.	Liquid Binder or Thinner		
	Refractory Ceramic Colloid	20 - 50	N/A
	Water	50 - 80	
В.	After Normal Use See Section 8		
C.	Mist or Dried dust from spraying	30 - 50	10 mg/m <sup>3</sup>
	(Not formed in normal use)		· ·

All Materials contained within are located on the TOSCA Inventory List

This product is compliant with the RoHS Directive.

#### **SECTION 3: PHYSICAL DATA**

	As Supplied	As Cured
Boiling Point (§F):	212°F	N/A
Specific Gravity (H2O=1):	1.2 - 1.4	1.2-2.5
Vapor Pressure (mm Hg.):	0.2-1.2	N/A
Vapor Density (Air=1):	>1	N/A
Percent Volatile By Volume:	20-50	N/A
Solubility In Water:	Soluble	Insoluble
Evaporation Rate (H2O=1):	1	N/A
Appearance/Odor:	Clear or Opalescent liquid	Solid
	No Odor	No Odor

#### **SECTION 4: FIRE AND EXPLOSION HAZARD DATA**

Extinguishing Media: N/A
Flash Point (Method Used): N/A
Flammable Limit: N/A
Unusual Fire and Explosive Hazards: LEL = N/A
Special Fire Fighting Procedures: UEL = N/A

#### **SECTION 5: HEALTH HAZARD DATA**

Primary Route Of Entry: Inhalation, Ingestion, Eyes and Skin Irritation.

Effects Of Overexposure: Long term overexposure to inhalation of mists or dust of dried down particles may cause tissue response in the lung (Pneumoconiosis).

Emergency & First Aid Procedures: Terminate exposure. Flush eyes with water for 15 minutes. Call a doctor

N/A

SECTION 7: SPILL OR LEAK PROCEDURES

**Recommended Procedures:** Routine Housekeeping

Waste Disposal Method: N/A

#### **SECTION 8: SPECIAL PROTECTION INFORMATION**

**SECTION 6: FIRE, EXPLOSIVE AND REACTIVITY DATA** 

**Respiratory Protection (Specify Type):** Respiratory protection is not normally needed since the volatility and toxicity are low. If significant mists or aerosols are generated, wear a NIOSH approved or equivalent respirator, (ANSI Z-88.2, 1980 for requirements and selection).

Ventilation: Local Exhaust: Follow OSHA Standard 29 CFR 1910.94. Mechanical (General): Follow OSHA Standard 29 CFR 1910.94.

Protective Gloves: Recommended.

Eye Protection: Goggles/Safety Glasses Recommended.

Other Protective Equipment: As required to meet applicable OSHA Standards .

#### **SECTION 9: SPECIAL PRECAUTIONS**

Precautions To Be Taken After Use And Upon Removal: This product as manufactured is a Silicate could transform upon heating to mullet and crystobalite (a form of crystalline silica). Removal of this product after use may result in the generation of dust. Repeated inhalation of respirable free crystalline silica dust may cause delayed lung injury (silicosis). The recommended TLV/PEL for free crystalline silica is derived from the formula: 10 mg/cu m

1/2(-----)#

% Respirable quartz + 2

\*(Reference 1984-85 ACGIH TLV Booklet, Page 34). Appropriate ventilation should be provided and protective equipment should be worn in compliance with OSHA standard currently 29 CFR 1910.134 (NIOSH approved, air purifying, half mask or full face-piece respirator with appropriate filter pad or cartridge(s)).

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#### COTRONICS CORPORATION

#### DURABOND 950 Aluminum 952 Nickel 954 Stainless DURABOND 950FS-952FS-954FS ADHESIVES & FAST SET PUTTIES

Part 1 Powder

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996 This product is compliant with the RoHS Directive.

**SECTION ONE** 

Chemical Name And Synonyms: N/A Mixture

Formula: N/A Comments: N/A

Chemical Family: Base: Proprietary Aluminum or Stainless Composition

Binder: Proprietary Silicate Alumina Bond

#### **SECTION 2: COMPOSITION INFORMATION**

Part A Base	CAS#	WT. %	TVL / PEL
950 Aluminum	7429-90-5	90 - 100	
952 Nickel	744-002-0	90 - 100	
954 316 Stainless Steel (Alloy)	Fe 7439-89-6	90 -100 (total	
` ,,	Mo 7439-98-7	alloy content)	
	Ch 7440-47-3	, ,	
	Ni 7440-02-0		
Proprietary Refractory Oxide		0 - 10	$3 \text{ mg/m}^3 / 5 \text{ mg/m}^3$

Part B Binders (950, 952, 954) See Page 2

#### **SECTION 3: PHYSICAL DATA**

	Liquid	As Cured
Boiling Point (°F):	212°F as mixed	N/A
Specific Gravity Range (H2O=1):	Liquid part 1.0,	1.5-2.5
Vapor Pressure (mm Hg.) :	Liquid phase 760 @ 212°F powder N/A	N/A
Vapor Density (Air=1) :	N/A	N/A
Volatile By Volume (%):	Liquid phase 10 - 30	N/A
Solubility in Water:	Liquid phase soluble	Insoluble
Evaporation Rate (=1):	N/A	N/A
Appearance/Odor:	Base powders, No odor	Solid, No Odor

Activator clear liquid, No Odor

Volatile Constituent: Water Solid

#### **SECTION 4: FIRE AND EXPLOSION HAZARD DATA**

Extinguishing Media: N/A
Flash Point (Method Used): N/A
Flammable Limit: N/A
Unusual Fire and Explosive Hazards: LEL = N/A
Special Fire Fighting Procedures: UEL = N/A

**Sara Section 313 Supplier Notification:** This product contains the following chemical (s) subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1968 and of 40 CFR 372: Nickel, Chromium. Refer to the Hazardous Ingredients section of this MSDS for the appropriate CAS numbers.

#### **SECTION 5: HEALTH HAZARD DATA**

Nickel: LD50: Oral Rat > 5000 mg/kg.

IARC found there was inadequate evidence that metallic nickel or chromium is carcinogenic to humans but since there was sufficient evidence that is carcinogenic to animals, IARC concluded that metallic nickel and chromium is possibly carcinogenic to humans. Epidemiological studies of workers exposed to nickel powder and to dust and fumes generated in the production of nickel alloys and of stainless steel have not indicated the presence of a significant respiratory cancer hazard.

**Effects Of Overexposure:** *Skin Contact:* Repeated contact with metallic nickel can cause nickel sensitivity and allergic skin rashes.

**Emergency And First Aid Procedures:** Flush eyes and skin with copious quantities of water. Get immediate medical attention for eyes. If swallowed, consult physician immediately.

#### **SECTION 6: FIRE, EXPLOSIVE AND REACTIVITY DATA**

Stability: Stable Incompatibility (Materials To Avoid): N/A Hazardous Decomposition Products: None

Hazardous Polymerization: Will Not Occur

#### **SECTION 7: SPILL OR LEAK PROCEDURES**

**Steps To Be Taken In Case Material Is Released Or Spilled:** Sweep up spilled powders and dispose in approved industrial waste container. Hose spilled liquids or mixed adhesive with water, immediately. 950,952, 954 adhesives are not water soluble after drying. **Waste Disposal Method:** Approved industrial waste disposal means.

#### **SECTION 8: SPECIAL PROTECTION INFORMATION**

**Respiratory Protection (Specify Type):** NIOSH approved\*. Respirators recommended for spray applications.

**Ventilation:** Local Exhaust: Vacuuming with the vacuum exhaust passing through a high efficiency particulate arresting (HEPA) filter is the exhaust is discharged into the workplace. **Protective Gloves:** Recommended.

Eye Protection: Recommended.

Other Protective Equipment: Rubber aprons, lab coats, etc. to protect clothing.

#### **SECTION 9: SPECIAL PRECAUTIONS**

**Precautions To Be Taken In Handling And Storing:** Keep container closed and avoid getting wet until ready to use.

**Other Precautions:** wash hands thoroughly before eating or smoking. Avoid getting powder in body openings, including cuts, sores, mouth, etc. Use with adequate ventilation. Avoid repeated skin contact. Wash skin thoroughly after handling.

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Date Prepared 01/02/89 Date Revised 02/23/06

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<sup>\*(</sup>Reference 1984-85 ACGIH TLV Booklet, Page 34). Appropriate ventilation should be provided and protective equipment should be worn in compliance with OSHA standard currently 29 CFR 1910.134 (NIOSH approved, air purifying, half mask or full face-piece respirator with appropriate filter pad or cartridge(s)).

## MATERIAL SAFETY DATA SHEET TRADE NAME

#### **Durabond Adhesives Part B Binder**

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

#### SECTION ONE: PRODUCT IDENTIFICATION

Chemical Name And Synonyms: N/A Mixture

Chemical Family: Alumina, Phosphate or Silica
Chemical Family: Refractory Ceramic Colloid

Proprietary Silicate, Phosphate, Alumina, Colloid Bond.

#### SECTION 2: COMPOSITION INFORMATION

	As Manufactured:	WT. %	TVL/PEL
A.	Liquid Binder or Thinner		
	Refractory Ceramic Colloid	20 - 50	N/A
	Water	50 - 80	
В.	After Normal Use See Section 8		
C.	Mist or Dried dust from spraying	30 - 50	10 mg/m <sup>3</sup>
	(Not formed in normal use)		· ·
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All Materials contained within are located on the TSCA Inventory List This product is compliant with the RoHS Directive.

#### SECTION 3: PHYSICAL DATA

SECTION 3:	PHYSICAL DATA	
	As Supplied	As Cured
Boiling Point (§F):	212°F	N/A
Specific Gravity (H2O=1):	1.2 - 1.4	1.2-2.5
Vapor Pressure (mm Hg.) :	0.2-1.2	N/A
Vapor Density (Air=1):	>1	N/A
Percent Volatile By Volume:	20-50	N/A
Solubility In Water:	Soluble	Insoluble
Evaporation Rate (H2O=1):	1	N/A
Appearance/Odor:	Clear or Opalescent I	iquid Solid
	/No Odor	No Odor

#### **SECTION 4: FIRE AND EXPLOSION HAZARD DATA**

Extinguishing Media: N/A
Flash Point (Method Used): N/A
Flammable Limit: N/A
Unusual Fire and Explosive Hazards: LEL = N/A
Special Fire Fighting Procedures: UEL = N/A

#### **SECTION 5: HEALTH HAZARD DATA**

**Primary Route Of Entry:** Inhalation, Ingestion, Eyes and Skin Irritation.

**Effects Of Overexposure:** Long term overexposure to inhalation of mists or dust of dried down particles may cause tissue response in the lung (Pneumoconiosis).

Emergency & First Aid Procedures: Terminate exposure. Flush eyes with water for

15 minutes. Call a doctor

**SECTION 6: FIRE, EXPLOSIVE AND REACTIVITY DATA** 

N/A

**SECTION 7: SPILL OR LEAK PROCEDURES** 

**Recommended Procedures:** Routine Housekeeping

Waste Disposal Method: N/A

#### SECTION 8: SPECIAL PROTECTION INFORMATION

**Respiratory Protection (Specify Type):** Respiratory protection is not normally needed since the volatility and toxicity are low. If significant mists or aerosols are generated, wear a NIOSH approved or equivalent respirator, (ANSI Z-88.2, 1980 for requirements and selection).

**Ventilation:** Local Exhaust: Follow OSHA Standard 29 CFR 1910.94. **Mechanical (General):** Follow OSHA Standard 29 CFR 1910.94.

Protective Gloves: Recommended.

Eye Protection: Goggles/Safety Glasses Recommended.

Other Protective Equipment: As required to meet applicable OSHA Standards .

#### **SECTION 9: SPECIAL PRECAUTIONS**

Precautions to be Taken After Use And Upon Removal: This product as manufactured contains a Silicate which could transform upon heating to mullet and crystobalite (a form of crystalline silica). Removal of this product after use may result in the generation of dust. Repeated inhalation of respirable free crystalline silica dust may cause delayed lung injury (silicosis). The recommended TLV/PEL for free crystalline silica is derived from the formula: 10 mg/cu m

½(-----)#
% Respirable quartz + 2

\*(Reference 1984-85 ACGIH TLV Booklet, Page 34). Appropriate ventilation should be provided and protective equipment should be worn in compliance with OSHA standard currently 29 CFR 1910.134 (NIOSH approved, air purifying, half mask or full face-piece respirator with appropriate filter pad or cartridge(s)).

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DATE PREPARED: 11/01/85 DATE REVISED: 02/23/06

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#### COTRONICS CORPORATION

#### DURABOND 950 Aluminum 952 Nickel 954 Stainless **DURABOND 950FS-952FS-954FS** ADHESIVES & FAST SET PUTTIES

Part 1 Powder

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996 This product is compliant with the RoHS Directive.

**SECTION ONE** 

Chemical Name And Synonyms: N/A Mixture

Formula: N/A Comments: N/A

**Chemical Family:** Base: Proprietary Aluminum or Stainless Composition

Binder: Proprietary Silicate Alumina Bond

SECTION 2:	COMPOSITION	INFORMATIO	N
Part A Base	CAS#	WT. %:	TVL/PEL:
950 Aluminum	7429-90-5	90 - 100	
952 Nickel	744-002-0	90 - 100	
954 316 Stainless Steel (Alloy)	Fe 7439-89-6	90 -100 (total	
	Mo 7439-98-7	alloy content)	
	Ch 7440-47-3		
	Ni 7440-02-0		
Proprietary Refractory Oxide		0 - 10	2F/cc

\*(1984-85 ACGIH TLV Booklet, Page 50)

Part B Binders (950, 952, 954) See Page 2

#### **SECTION 3: PHYSICAL DATA**

	Liquid	As Curec
Boiling Point (°F):	212°F as mixed	N/A
Specific Gravity Range (H2O=1):	Liquid part 1.0,	1.5-2.5
Vapor Pressure (mm Hg.) :	Liquid phase 760 @ 212°F powder N/A	N/A
Vapor Donsity (Air-1):	NI/A	NI/A

Vapor Density (Air=1) : Volatile By Volume (%): Liquid phase 10 - 30 N/A Solubility in Water: Liquid phase soluble Insoluble Evaporation Rate (=1): N/A N/A

Appearance/Odor: Base powders, No odor Solid. No Odor

Activator clear liquid, No Odor

Volatile Constituent: Water Solid

#### SECTION 4: FIRE AND EXPLOSION HAZARD DATA

Extinguishing Media: N/A Flash Point (Method Used): N/A Flammable Limit: N/A Unusual Fire and Explosive Hazards: LEL = N/A Special Fire Fighting Procedures: UEL = N/A

Sara Section 313 Supplier Notification: This product contains the following chemical (s) subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1968 and of 40 CFR 372: Nickel, Chromium. Refer to the Hazardous Ingredients section of this MSDS for the appropriate CAS numbers.

#### **SECTION 5: HEALTH HAZARD DATA**

Nickel: LD50: Oral Rat > 5000 mg/kg.

IARC found there was inadequate evidence that metallic nickel or chromium is carcinogenic to humans but since there was sufficient evidence that is carcinogenic to animals, IARC concluded that metallic nickel and chromium is possibly carcinogenic to humans. Epidemiological studies of workers exposed to nickel powder and to dust and fumes generated in the production of nickel alloys and of stainless steel have not indicated the presence of a significant respiratory cancer hazard.

Effects Of Overexposure: Skin Contact: Repeated contact with metallic nickel can cause nickel sensitivity and allergic skin rashes.

Emergency And First Aid Procedures: Flush eves and skin with copious quantities of water. Get immediate medical attention for eyes. If swallowed, consult physician immediately.

#### **SECTION 6: FIRE, EXPLOSIVE AND REACTIVITY DATA**

Stability: Stable Incompatibility (Materials To Avoid): N/A Hazardous Decomposition Products: None

**Hazardous Polymerization:** Will Not Occur

#### SECTION 7: SPILL OR LEAK PROCEDURES

Steps To Be Taken In Case Material Is Released Or Spilled: Sweep up spilled powders and dispose in approved industrial waste container. Hose spilled liquids or mixed adhesive with water, immediately. 950,952,954 adhesives are not water soluble after drying. Waste Disposal Method: Approved industrial waste disposal means.

#### SECTION 8: SPECIAL PROTECTION INFORMATION

Respiratory Protection (Specify Type): NIOSH approved\*. Respirators recommended for spray applications.

Ventilation: Local Exhaust: Vacuuming with the vacuum exhaust passing through a high efficiency particulate arresting (HEPA) filter is the exhaust is discharged into the workplace. Protective Gloves: Recommended.

Eye Protection: Recommended.

Other Protective Equipment: Rubber aprons, lab coats, etc. to protect clothing.

#### **SECTION 9: SPECIAL PRECAUTIONS**

Precautions To Be Taken In Handling And Storing: Keep container closed and avoid getting wet until ready to use.

Other Precautions: wash hands thoroughly before eating or smoking. Avoid getting powder in body openings, including cuts, sores, mouth, etc. Use with adequate ventilation. Avoid repeated skin contact. Wash skin thoroughly after handling.

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Date Prepared 01/02/89 Date Revised 02/23/06

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<sup>\*(</sup>Reference 1984-85 ACGIH TLV Booklet, Page 34). Appropriate ventilation should be provided and protective equipment should be worn in compliance with OSHA standard currently 29 CFR 1910.134 (NIOSH approved, air purifying, half mask or full face-piece respirator with appropriate filter pad or cartridge(s)).

## MATERIAL SAFETY DATA SHEET TRADE NAME

#### **Durabond Adhesives Part B Binder**

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

#### SECTION ONE: PRODUCT IDENTIFICATION

Chemical Name And Synonyms: N/A Mixture

Chemical Family: Alumina, Phosphate or Silica
Chemical Family: Refractory Ceramic Colloid

Proprietary Silicate, Phosphate, Alumina, Colloid Bond.

#### SECTION 2: COMPOSITION INFORMATION

	As Manufactured:	WT. %	TVL/PEL
A.	Liquid Binder or Thinner		
	Refractory Ceramic Colloid	20 - 50	N/A
	Water	50 - 80	
В.	After Normal Use See Section 8		
C.	Mist or Dried dust from spraying	30 - 50	10 mg/m <sup>3</sup>
	(Not formed in normal use)		· ·
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All Materials contained within are located on the TSCA Inventory List This product is compliant with the RoHS Directive.

#### SECTION 3: PHYSICAL DATA

SECTION 3:	PHYSICAL DATA	
	As Supplied	As Cured
Boiling Point (§F):	212°F	N/A
Specific Gravity (H2O=1):	1.2 - 1.4	1.2-2.5
Vapor Pressure (mm Hg.) :	0.2-1.2	N/A
Vapor Density (Air=1):	>1	N/A
Percent Volatile By Volume:	20-50	N/A
Solubility In Water:	Soluble	Insoluble
Evaporation Rate (H2O=1):	1	N/A
Appearance/Odor:	Clear or Opalescent I	iquid Solid
	/No Odor	No Odor

#### **SECTION 4: FIRE AND EXPLOSION HAZARD DATA**

Extinguishing Media: N/A
Flash Point (Method Used): N/A
Flammable Limit: N/A
Unusual Fire and Explosive Hazards: LEL = N/A
Special Fire Fighting Procedures: UEL = N/A

#### **SECTION 5: HEALTH HAZARD DATA**

**Primary Route Of Entry:** Inhalation, Ingestion, Eyes and Skin Irritation.

**Effects Of Overexposure:** Long term overexposure to inhalation of mists or dust of dried down particles may cause tissue response in the lung (Pneumoconiosis).

Emergency & First Aid Procedures: Terminate exposure. Flush eyes with water for

15 minutes. Call a doctor

**SECTION 6: FIRE, EXPLOSIVE AND REACTIVITY DATA** 

N/A

**SECTION 7: SPILL OR LEAK PROCEDURES** 

**Recommended Procedures:** Routine Housekeeping

Waste Disposal Method: N/A

#### SECTION 8: SPECIAL PROTECTION INFORMATION

**Respiratory Protection (Specify Type):** Respiratory protection is not normally needed since the volatility and toxicity are low. If significant mists or aerosols are generated, wear a NIOSH approved or equivalent respirator, (ANSI Z-88.2, 1980 for requirements and selection).

**Ventilation:** Local Exhaust: Follow OSHA Standard 29 CFR 1910.94. **Mechanical (General):** Follow OSHA Standard 29 CFR 1910.94.

Protective Gloves: Recommended.

Eye Protection: Goggles/Safety Glasses Recommended.

Other Protective Equipment: As required to meet applicable OSHA Standards .

#### **SECTION 9: SPECIAL PRECAUTIONS**

Precautions to be Taken After Use And Upon Removal: This product as manufactured contains a Silicate which could transform upon heating to mullet and crystobalite (a form of crystalline silica). Removal of this product after use may result in the generation of dust. Repeated inhalation of respirable free crystalline silica dust may cause delayed lung injury (silicosis). The recommended TLV/PEL for free crystalline silica is derived from the formula: 10 mg/cu m

½(-----)#
% Respirable quartz + 2

\*(Reference 1984-85 ACGIH TLV Booklet, Page 34). Appropriate ventilation should be provided and protective equipment should be worn in compliance with OSHA standard currently 29 CFR 1910.134 (NIOSH approved, air purifying, half mask or full face-piece respirator with appropriate filter pad or cartridge(s)).

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DATE PREPARED: 11/01/85 DATE REVISED: 02/23/06

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## MATERIAL SAFETY DATA SHEET Cotronics Ceramic Adhesives

Resbond 940 Zirconia Ceramic Adhesive Resbond 940HT Alumina Ceramic Adhesive Resbond 940LE Silica Ceramic Adhesive Resbond 940HE High Expansion Adhesive Resbond 940SS Stainless Steel

Part 1 BASE (POWDER)

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

#### **SECTION ONE:**

**Chemical Name And Synonyms:** N/A Mixture

Chemical Family: Alumina, Zirconia or Silica

Chemical Formula: N/A

Part A: Powder

Refractory Ceramic Composition (Aluminum, Zirconia, Stainless 316 or Silica)

Part B: Liquid Binder or Water (See page 2)

Proprietary Silicate, Alumina, Zirconia, Colloid Bond

#### **SECTION 2: COMPOSITION INFORMATION**

A. As Manufactured:	WT. %	TVL/PEL
Part A: Powder		
Refractory Ceramic Powder	100	5 mg/ Cu M
940SS 316 Stainless Steel (Alloy)	Fe 7439-89-6	90 -100 (total
•	Mo 7439-98-7	alloy content)
	Ch 7440-47-3	,
	Ni 7440-02-0	
Part B: Liquid Binder or Water		
Refractory Ceramic Colloid	0 - 30	N/A
Water	0 - 100	

B. After Normal Use See Section 8

All materials contained within are listed on the TSCA Inventory list. This product is compliant with the RoHS Directive.

#### **SECTION 3: PHYSICAL DATA**

	As Supplied	Cured
Boiling Point (°F) :	212	N/A
Vapor Density (Air=1):	>1	N/A
Specific Gravity Range (H2O=1):	1.5 - 3	1.2 - 2.5
Percent Volatile By Volume:	20 - 50	N/A
(%) Solubility In Water:	Soluble	Insoluble
Evaporation Rate (H2O=1):	1	N/A
Appearance/Odor:	Creamy Paste/No O	dor Solid
Vapor Pressure (mm Hg.) :	0.2 - 1.2	N/A

#### **SECTION 4: FIRE AND EXPLOSION HAZARD DATA**

Extinguishing Media: N/A Flash Point (Method Used): N/A

#### **SECTION 5: HEALTH HAZARD DATA**

**Effects Of Overexposure:** Slight dermatological irritation after prolonged skin contact. *Emergency And First Aid Procedures:* Flush eyes and skin with copious quantities of water. Get immediate medical attention for eyes. If swallowed, consult physician immediately.

#### **SECTION 6: FIRE, EXPLOSIVE AND REACTIVITY DATA**

Stability: Stable

Incompatibility (Materials to Avoid): Aluminum metal powder.

Hazardous Decomposition Products: None.

Hazardous Polymerization: Will Not Occur.

#### **SECTION 7: SPILL OR LEAK PROCEDURES**

Steps To Be Taken In Case Material Is Released Or Spilled: Sweep up spilled powder and dispose in approved industrial waste container. Hose spilled wet cement paste with water, immediately. Cement is not water soluble after setting up. Note Liquid is mild acid.

Waste Disposal Method: Approved industrial waste disposal means.

#### SECTION 8: SPECIAL PROTECTION INFORMATION

**Respiratory Protection (Specify Type):** NIOSH approved\* Respirators recommended for spray applications.

**Ventilation:** Local Exhaust: Vacuuming with the vacuum exhaust passing through a high efficiency particulate arresting (HEPA) filter is the exhaust is discharged into the workplace.

**Protective Gloves:** Recommended **Eye Protection:** Recommended

Other Protective Equipment: Rubber aprons, lab coats, etc. to protect clothing.

#### **SECTION 9: SPECIAL PRECAUTIONS**

**Precautions To Be Taken In Handling And Storing:** Keep container closed and avoid getting wet until ready to use.

Other Precautions: Wash Hands Thoroughly Before Eating Or Smoking. Avoid Getting Powder In Body Openings, Including Cuts, Sores, Mouth, Etc.

\*(Reference 1984-85 ACGIH TLV Booklet, Page 34). Appropriate ventilation should be provided and protective equipment should be worn in compliance with OSHA standard currently 29 CFR 1910.134 (NIOSH approved, air purifying, half mask or full face-piece respirator with appropriate filter pad or cartridge(s)).

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DATE PREPARED: 11/01/85 DATE REVISED: 02/23/06

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## MATERIAL SAFETY DATA SHEET TRADE NAME

#### Resbond 940 940HT 940LE 940HE 940SS

#### Part 2 ACTIVATOR (LIQUID)

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

#### SECTION ONE: PRODUCT IDENTIFICATION

Chemical Name And Synonyms: N/A Mixture

Chemical Family: Alumina, Quartz, Zirconia, or Silica

Chemical Family: Refractory Ceramic Colloid, Proprietary Silicate,

Colloid Bond.

#### **SECTION 2: COMPOSITION INFORMATION**

	As Manufactured:	WT. %	TVL/PEL
A.	Liquid Binder or Thinner		
	Refractory Ceramic Colloid	20 - 50	N/A
	Water	50 - 80	
В.	After Normal Use See Section 8		
C.	Mist or Dried dust from spraying	30 - 50	10 mg/m <sup>3</sup>
	(Not formed in normal use)		· ·

All Materials contained within are located on the TOSCA Inventory List

This product is compliant with the RoHS Directive.

#### **SECTION 3: PHYSICAL DATA**

	As Supplied	As Cured
Boiling Point (§F):	212°F	N/A
Specific Gravity (H2O=1):	1.2 - 1.4	1.2-2.5
Vapor Pressure (mm Hg.):	0.2-1.2	N/A
Vapor Density (Air=1):	>1	N/A
Percent Volatile By Volume:	20-50	N/A
Solubility In Water:	Soluble	Insoluble
Evaporation Rate (H2O=1):	1	N/A
Appearance/Odor:	Clear or Opalescent liquid	Solid
	No Odor	No Odor

#### **SECTION 4: FIRE AND EXPLOSION HAZARD DATA**

Extinguishing Media: N/A
Flash Point (Method Used): N/A
Flammable Limit: N/A
Unusual Fire and Explosive Hazards: LEL = N/A
Special Fire Fighting Procedures: UEL = N/A

#### **SECTION 5: HEALTH HAZARD DATA**

Primary Route Of Entry: Inhalation, Ingestion, Eyes and Skin Irritation.

Effects Of Overexposure: Long term overexposure to inhalation of mists or dust of dried down particles may cause tissue response in the lung (Pneumoconiosis).

Emergency & First Aid Procedures: Terminate exposure. Flush eyes with water for 15 minutes. Call a doctor

N/A

SECTION 7: SPILL OR LEAK PROCEDURES

**Recommended Procedures:** Routine Housekeeping

Waste Disposal Method: N/A

#### **SECTION 8: SPECIAL PROTECTION INFORMATION**

**SECTION 6: FIRE, EXPLOSIVE AND REACTIVITY DATA** 

**Respiratory Protection (Specify Type):** Respiratory protection is not normally needed since the volatility and toxicity are low. If significant mists or aerosols are generated, wear a NIOSH approved or equivalent respirator, (ANSI Z-88.2, 1980 for requirements and selection).

Ventilation: Local Exhaust: Follow OSHA Standard 29 CFR 1910.94. Mechanical (General): Follow OSHA Standard 29 CFR 1910.94.

Protective Gloves: Recommended.

Eye Protection: Goggles/Safety Glasses Recommended.

Other Protective Equipment: As required to meet applicable OSHA Standards .

#### **SECTION 9: SPECIAL PRECAUTIONS**

Precautions To Be Taken After Use And Upon Removal: This product as manufactured is a Silicate could transform upon heating to mullet and crystobalite (a form of crystalline silica). Removal of this product after use may result in the generation of dust. Repeated inhalation of respirable free crystalline silica dust may cause delayed lung injury (silicosis). The recommended TLV/PEL for free crystalline silica is derived from the formula: 10 mg/cu m

1/2(-----)#

% Respirable quartz + 2

\*(Reference 1984-85 ACGIH TLV Booklet, Page 34). Appropriate ventilation should be provided and protective equipment should be worn in compliance with OSHA standard currently 29 CFR 1910.134 (NIOSH approved, air purifying, half mask or full face-piece respirator with appropriate filter pad or cartridge(s)).

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#### **RESBOND 907GF**

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

#### **SECTION ONE: PRODUCT IDENTIFICATION**

**Chemical Name and Synonyms:** N/A Mixture

Chemical Family: Aluminosilicate, Alumina or Silicate

Chemical Formula: N/A

IN/A

Comments: See Section 9

#### **SECTION 2: COMPOSITION INFORMATION**

Α.	As Manufactured:	WT. %	TVL/PEL

Refractory Ceramics 50-70 Refractory Colloid\* 20-30 Water 10-20

#### B. After Normal Use See Section 8

All materials contained within are listed on the TSCA Inventory list. This product is compliant with the RoHS Directive.

#### **SECTION 3: PHYSICAL DATA**

	As Supplied	Cured
Boiling Point (°F) :	212	N/A
Vapor Density (Air=1):	>1	N/A
Specific Gravity Range (H2O = 1):	1	0.5 - 0.8
Percent Volatile by Volume:	70 - 80	N/A
(%) Solubility in Water:	Soluble	Insoluble
Evaporation Rate (H2O = 1):	1	N/A
Appearance and Odor:	Creamy Paste No Odor.	Solid
Vapor Pressure (mm Hg.):	17	N/A
VOLATILE ORGANIC CONTENT	VOC = O	

Extinguishing Media: N/A
Flash Point (Method Used): N/A
Flammable Limit: N/A
Unusual Fire And Explosive Hazards: LEL = N/A
Special Fire Fighting Procedures: UEL= N/A

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SECTION 4: FIRE AND EXPLOSION HAZARD DATA

#### **SECTION 5: HEALTH HAZARD DATA**

Primary Route Of Entry: Inhalation, Ingestion And Skin Irritation.

**Emergency and First Aid Procedures:** Flush eyes with copious quantities of water. Get immediate medical attention for eyes. If swallowed, consult a physician immediately. **Effects Of Overexposure:** 

Currently, studies have shown that signs of slight dermatological irritation have occurred after prolonged skin contact. This product contains minor amounts of binders which burn out during first heat up. Emergency and First Aid Procedures Terminate Exposure.

#### **SECTION 6: FIRE, EXPLOSIVE AND REACTIVITY DATA**

N/A

**SECTION 7: SPILL OR LEAK PROCEDURES** 

Recommended Procedures: N/A

Waste Disposal Method: Routine Housekeeping

#### **SECTION 8: SPECIAL PROTECTION INFORMATION**

Respiratory Protection (Specify Type) Dust respirator in compliance with OSHA Standard currently 29 CFR 1910.134 (NIOSH Approved, air purifying, half mask or full face-piece respirator with appropriate filter pad or cartridge(s)).

Ventilation: Local Exhaust: Follow OSHA Standard 29 CFR 1910.94 Mechanical (General): Follow OSHA Standard 29 CFR 1910.94

Protective Gloves: Recommended

Eye Protection: Goggles/Safety Glasses Recommended

Other Protective Equipment: Long Sleeve, Loose Fitting Clothing and Barrier Cream

Material does not appear on NTP and/or LAC lists of reports for Carcinogens

#### **SECTION 9: SPECIAL PRECAUTIONS**

#### Precautions To Be Taken During First Exposure To Heat:

Trace temporary organic binders will burn off during the first exposure to heat. (500 - 1000°F) carbon monoxide, carbon dioxide, oxides of nitrogen, reactive hydrocarbons and a small amount of formaldehyde may accompany binder burn-off. Use adequate ventilation or other precautions to eliminate vapors resulting from binder burn-off. Exposure to burn-off fumes may cause respiratory tract irritation.

#### Precautions To Be Taken After Use And Upon Removal:

This product as manufactured contains an aluminosilicate which could transform upon heating to mullet and crystobalite (a form of crystalline silica). Removal of this product after use may result in the generation of dust. Repeated inhalation of respirable free crystalline silica dust may cause delayed lung injury (silicosis). The recommended TLV/PEL for free crystalline silica is derived from the formula: 10 mg/cu m

⁄<sub>2</sub>(-----)#

% Respirable quartz + 2

<sup>\* (</sup>Water Base)

<sup>\*(</sup>Reference 1984-85 ACGIH TLV Booklet, Page 34). Appropriate ventilation should be provided and protective equipment should be worn in compliance with OSHA standard currently 29 CFR 1910.134 (NIOSH approved, air purifying, half mask or full face-piece respirator with appropriate filter pad or cartridge(s)).

#### Cotronics Ceramic Adhesives Part A

905 Quartz Ceramic Adhesive 906 Magnesia Ceramic Adhesive 908 Alumina Ceramic Adhesive 908 Alumina Ceramic Adhesive 919 Zirconia Ceramic Adhesive

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

SECTION ONE:

Chemical Name And Synonyms: N/A Mixture

Chemical Family: Alumina, Quartz, Magnesia, Zirconia, or Silica.

Chemical Formula: N/A

Part A: Powder

Refractory Ceramic Composition (See Type Above) **Part B:** Liquid Binder or Water (See page 2)

Proprietary Silicate, Phosphate, Alumina, Zirconia, Colloid Bond

**SECTION 2: COMPOSITION INFORMATION** 

A. As Manufactured: WT. % TVL/PEL
Part A: Powder
Refractory Ceramic Powder 100 5 mg/ Cu M
Part B: Liquid Binder or Water
Refractory Ceramic Colloid 0 - 30 N/A
Water 0 - 100

B. After Normal Use See Section 8

All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

#### **SECTION 3: PHYSICAL DATA**

	As Supplied	Cured
Boiling Point (°F):	212	N/A
Vapor Density (Air=1):	>1	N/A
Specific Gravity Range (H2O=1):	1.5 - 3	1.2 - 2.5
Percent Volatile By Volume:	20 - 50	N/A
(%) Solubility In Water:	Soluble	Insoluble
Evaporation Rate (H2O=1):	1	N/A
Appearance/Odor:	Creamy Paste/No Odor	Solid
Vapor Pressure (mm Hg.) :	0.2 - 1.2	N/A

#### **SECTION 4: FIRE AND EXPLOSION HAZARD DATA**

Extinguishing Media: N/A
Flash Point (Method Used): N/A
Flammable Limit: N/A
Unusual Fire And Explosive Hazards: Lel = N/A
Special Fire Fighting Procedures: Uel = N/A

#### **SECTION 5: HEALTH HAZARD DATA**

**Effects Of Overexposure:** Slight dermatological irritation after prolonged skin contact. *Emergency And First Aid Procedures:* Flush eyes and skin with copious quantities of water. Get immediate medical attention for eyes. If swallowed, consult physician immediately.

#### **SECTION 6: FIRE, EXPLOSIVE AND REACTIVITY DATA**

Stability: Stable

Incompatibility (Materials to Avoid): Aluminum metal powder.

Hazardous Decomposition Products: None.

Hazardous Polymerization: Will Not Occur.

#### **SECTION 7: SPILL OR LEAK PROCEDURES**

Steps To Be Taken In Case Material Is Released Or Spilled: Sweep up spilled powder and dispose in approved industrial waste container. Hose spilled wet cement paste with water, immediately. Cement is not water soluble after setting up. Note Liquid is mild acid.

Waste Disposal Method: Approved industrial waste disposal means.

#### **SECTION 8: SPECIAL PROTECTION INFORMATION**

**Respiratory Protection (Specify Type):** NIOSH approved\* Respirators recommended for spray applications.

**Ventilation:** Local Exhaust: Vacuuming with the vacuum exhaust passing through a high efficiency particulate arresting (HEPA) filter is the exhaust is discharged into the workplace.

**Protective Gloves:** Recommended **Eve Protection:** Recommended

Other Protective Equipment: Rubber aprons, lab coats, etc. to protect clothing.

#### **SECTION 9: SPECIAL PRECAUTIONS**

**Precautions To Be Taken In Handling and Storing:** Keep container closed and avoid getting wet until ready to use.

Other Precautions: Wash Hands Thoroughly Before Eating Or Smoking. Avoid Getting Powder In Body Openings, Including Cuts, Sores, Mouth, Etc.

\*(Reference 1984-85 ACGIH TLV Booklet, Page 34). Appropriate ventilation should be provided and protective equipment should be worn in compliance with OSHA standard currently 29 CFR 1910.134 (NIOSH approved, air purifying, half mask or full face-piece respirator with appropriate filter pad or cartridge(s)).

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## Cotronics 900 Series One Component Ceramic Adhesives 901, 904, 907, 931C, 989

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

#### **SECTION ONE:**

Chemical Name And Synonyms: N/A Mixture

Chemical Family: Mica, Silica, Alumina, Graphite Magnesia, or

Zirconia

Chemical Formula: N/A

Refractory Ceramic Composition (See Type Above)

Proprietary Silicate, Phosphate, Alumina, Zirconia, Colloid Bond

#### **SECTION 2: COMPOSITION INFORMATION**

As Manufactured:	WT. %	TVL/PEL
A. Refractory Ceramic Powder	20 - 40	5 mg/ Cu M
Refractory Ceramic Colloid	20 - 30	5 mg/ Cu M
Water	Balance	_

All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

#### **SECTION 3: PHYSICAL DATA**

	As Supplied	Cured
Boiling Point (°F) :	212	N/A
Vapor Density (Air=1):	>1	N/A
Specific Gravity Range (H2O=1):	1.5 - 3	1.2 - 2.5
Percent Volatile by Volume:	20 - 50	N/A
(%) Solubility in Water:	Soluble	Insoluble
Evaporation Rate (H2O=1):	1	N/A
Appearance/Odor:	Creamy Paste/No Odor	Solid
Vapor Pressure (mm Hg.):	0.2 - 1.2	N/A

#### SECTION 4: FIRE AND EXPLOSION HAZARD DATA

Extinguishing Media: N/A
Flash Point (Method Used): N/A
Flammable Limit: N/A
Unusual Fire And Explosive Hazards: Lel = N/A
Special Fire Fighting Procedures: Uel = N/A

DATE PREPARED: 11/01/85 DATE REVISED: 02/23/06

#### **SECTION 5: HEALTH HAZARD DATA**

**Effects of Overexposure:** Slight dermatological irritation after prolonged skin contact. *Emergency And First Aid Procedures:* Flush eyes and skin with copious quantities of water. Get immediate medical attention for eyes. If swallowed, consult physician immediately.

#### SECTION 6: FIRE, EXPLOSIVE AND REACTIVITY DATA

Stability: Stable Incompatibility (Materials to Avoid): None Hazardous Decomposition Products: None

Hazardous Polymerization: Will Not Occur

#### **SECTION 7: SPILL OR LEAK PROCEDURES**

Steps To Be Taken In Case Material Is Released Or Spilled: Sweep up spilled powder and dispose in approved industrial waste container. Hose spilled wet cement paste with water, immediately. Cement is not water soluble after setting up. Note liquid is mild acid.

Waste Disposal Method: Approved industrial waste disposal means.

#### SECTION 8: SPECIAL PROTECTION INFORMATION

**Respiratory Protection (Specify Type):** NIOSH approved\* respirators recommended for spray applications.

**Ventilation:** Local Exhaust: Vacuuming with the vacuum exhaust passing through a high efficiency particulate arresting (HEPA) filter is the exhaust is discharged into the workplace.

**Protective Gloves:** Recommended **Eye Protection:** Recommended

Other Protective Equipment: Rubber aprons, lab coats, etc. to protect clothing.

#### **SECTION 9: SPECIAL PRECAUTIONS**

**Precautions to be Taken in Handling and Storing:** Keep container closed and avoid getting wet until ready to use.

**Other Precautions:** Wash Hands Thoroughly Before Eating or Smoking. Avoid Getting Powder in Body Openings, Including Cuts, Sores, Mouth, etc.

Precautions To Be Taken After Use And Upon Removal: This product as manufactured contains Silicate which could transform upon heating to mullet and crystobalite (a form of crystalline silica). Removal of this product after use may result in the generation of dust. Repeated inhalation of respirable free crystalline silica dust may cause delayed lung injury (silicosis). The recommended TLV/PEL for free crystalline silica is derived from the formula: 10 mg/cu m

1/2(-----)#

% Respirable quartz + 2

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HIMS RATING Health = 1 Fire = 0 Reactivity = 0 HAZARD RATING: 0 = Insignificant 1 = Non-Toxic, Slight 2 = Moderate 3 = High 4 = Extreme

<sup>\*(</sup>Reference 1984-85 ACGIH TLV Booklet, Page 34). Appropriate ventilation should be provided and protective equipment should be worn in compliance with OSHA standard currently 29 CFR 1910.134 (NIOSH approved, air purifying, half mask or full face-piece respirator with appropriate filter pad or cartridge(s)).

#### MATERIAL SAFETY DATA SHEET **COTRONICS**

1529 Duraseal 1529H Duraseal

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Tel # 718-646-7996

**SECTION ONE** 

Chemical Name And Synonyms: Methylphenylsiloxane

Solution:

**Chemical Formula:** N/A

Polysiloxane Chemical Family:

Comments: N/A

**SECTION 2: COMPOSITION INFORMATION** 

A. Hazardous Materials

Toluene Acgih TLV: 100 Osha Pel: 200 : ppm

CAS REG NO.: 108-88-3\* Approx. %: 30 - 50 %

Proprietary: Polysiloxane Resin B. Nonhazardous

This product contains Methylpolysiloxanes which can generate Formaldehyde at approximately 300°Fand above, in atmospheres which contain oxygen. Formaldehyde is a skin and respiratory sensitizer, eye and throat irritant, acute toxicant, and potential cancer hazard.

Note: Product releases a visible fog of cyclic siloxanes and methoxy stopped siloxanes, as well as methanol under normal processing conditions.

All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

**SECTION 3: PHYSICAL PROPERTY INFORMATION** 

Appearance: Clear Liquid **Odor:** Aromatic PH: N/A

Melting or Freezing Point: N/A

**Boiling Point:** 232 (°F) 111°C

Vapor Pressure (22.0 mm Hg): (20°C) Vapor Density (AIR=1): 3.2

Solubility In Water: (20°F) Insoluble.

% Volatile (By Volume):

Solubility in Organic Solvent: Yes in Toluene.

Specific Gravity (Water 1): 1.14 Evaporation Rate (BUTYL Acetate = 1):

Density: 1138 MG/M<sub>3</sub>

SECTION 4: FIRE AND EXPLOSION HAZARD DATA

Flash Point: >52°F. Auto Ignition Temp.: 997°F.

Lower Explosion Limit (%): N/A. N/A.

Upper Explosion Limit(%): Flammable Limits In Air (%): Lower 1.2, Upper 7.0.

Extinguishing Media: All Standard Firefighting Media.

Special Firefighting Procedures: Flammable. Wear Respiratory Protection If In A

Confined Area.

**SECTION 5: HEALTH HAZARD DATA** 

Effects Of Overexposure: Inhalation: Excessive inhalation causes headaches, dizziness, nausea and in coordination. Harmful if inhaled. Eye Contact: Causes severe eye irritation. Skin Contact: Causes drying of the skin. Ingestion: Harmful if swallowed causes vomiting. nausea and diarrhea.

Medical Conditions Aggravated: Liver & Kidney.

HIMS RATING Health = 1 Fire = 2 Reactivity = 1

HAZARD RATING: 0 = Insignificant 1 = Non-Toxic, Slight 2 = Moderate 3 = High 4 = Extreme

Page 1 of 2

Chronic Effects Of Over Exposure: Dermatitis, Liver & Kidney Damage. Flush with water for 15 minutes and get Medical attention if irritation persists.

**Emergency And First Aid Procedures:** 

Ingestion: If swallowed do not induce vomiting, give large quantities of water to drink and get Medical attention. Never give anything by mouth to an unconscious person. Skin: Remove contaminated clothing and launder before reuse. Wash with soap and

water. Get Medical attention if irritation persists.

Inhalation: If inhaled, remove to fresh air, if not breathing give artificial respiration, preferably mouth-to-mouth. If breathing is difficult give oxygen. Get Medical attention. Eyes: In case of contact, immediately flush eyes with plenty of water for at least 15

minutes get Medical attention.

SECTION 6: REACTIVITY INFORMATION

Stability: Stable

Hazardous Polymerization: Will not occur.

Hazardous Decomposition Products: Carbon Monoxide. Carbon Dioxide.

Formaldehvde.

Incompatibility (Materials To Avoid): None Known.

Conditions To Avoid: Keep away from heat, sparks and open flame. Avoid any

source of ignition.

SECTION 7: SPILL OR LEAK PROCEDURES

Dike and absorb spill on inert material (sand, earth, etc.). Transfer diking material to containers for disposal. Wear protective clothing. Use breathing apparatus (MSHA/NIOSH-approved, pressure-demand, self-contained) or air mask for large spills in confined area. Wash clothing before reuse. Destroy clothing that cannot be decontaminated (i.e. shoes).

Waste Disposal Methods: Incinerate liquid in approved equipment. Landfill or incinerate contaminated diking material in accordance with local, state and federal regulations.

SECTION 8: SPECIAL PROTECTION INFORMATION

**Ventilation Type:** Normal room ventilation.

Respiratory Protection: None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH-approved or equivalent) suitable for concentrations and types

of air contaminants encountered. Protective Gloves: Impervious.

Eye Protection: Chemical splash goggles (ANSI Z-871 or approved equivalent).

Other Protective Equipment: Eyewash facility.

**SECTION 9: SPECIAL PRECAUTIONS** 

Store away from excessive heat (e.g., steam-pipes, radiators, from sources of ignition, and from reactive materials). Do not store near food or feed.

Note To Physician: Allergic dermatitis or respiratory response in susceptible individuals may be delayed even weeks or months after frequent and/or prolonged contact. Acute effects can include mucosa damage, severe laryngeal edema, and shock associated with corrosive agents. Possible mucosa damage may contraindicate the use of gastric lavage.

Note: solids content approximately 50%.

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> DATE PREPARED 12/20/89 **REVISED 02/23/06**

## MATERIAL SAFETY DATA SHEET COTRONICS DURASEAL 1529 UHT

**Manufactures Name: COTRONICS CORPORATION** 

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

SECTION ONE

Chemical Name and Synonyms: Alkyl Silicone Resin

Chemical Formula: N/A
Chemical Family: Silicone
Comments: N/A

**SECTION 2: COMPOSITION INFORMATION** 

A. Hazardous Materials

Alpha-Isotridecyl-Omega-Hydroxy-Polyglycolether 0.5% - 2.5 %

CAS Registry No.: 9043-30-5

Toluene (trace amount) 0.005%-0.5%

CAS Registry No108-88-3

All materials contained within are listed on the TSCA Inventory list.

This material is non hazardous under OSHA criteria

There are no carcinogenic ingredients present at or over 0.1% in this material This material contains between 0.005 and .05% of toluene identified as being a developmental reproductive toxin based on This product is compliant with the RoHS Directive.animal studies

**SECTION 3: PHYSICAL PROPERTY INFORMATION** 

Appearance: White Liquid Odor: Odorless

Melting or Freezing Point: -1°C, 30°F Boiling Point: -10°C, 212°F

Vapor Pressure: 17.25 mm Hg at 20°C (68°F)

Solubility In Water (20°F): Completely Miscible Density: 1.04 - 1.5 g/cm<sup>3</sup>

pH Value 4-6

SECTION 4: FIRE AND EXPLOSION HAZARD DATA

Flash Point:

Boiling Point:

Autoignition Temp.

Lower Explosion Limit (%):

Upper Explosion Limit(%):

N/A.

**Extinguishing Media:** All Standard Firefighting Media.

Special Firefighting Procedures: NA

Material does not burn and does not present any unusual fire or explosion hazards.

**SECTION 5: HEALTH HAZARD DATA** 

**Effects of Overexposure:** *Inhalation:* Excessive inhalation causes headaches, dizziness, nausea and in coordination. Harmful if inhaled. *Eye Contact:* May cause eye irritation. *Skin Contact:* May cause skin irritation. *Ingestion:* Harmful if swallowed. Causes vomiting, nausea, and diarrhea.

No toxic effects are expected and no known physical hazards.

Chronic Effects of Over Exposure: None Expected.

**Emergency and First Aid Procedures:** 

**Ingestion:** If swallowed, do not induce vomiting. Give large quantities of water to drink and get medical attention. Never give anything by mouth to an unconscious person. **Skin:** Remove contaminated clothing and launder before reuse. Wash with soap and

water. Get medical attention if irritation persists.

*Inhalation:* If inhaled, remove to fresh air, if not breathing give artificial respiration, preferably mouth-to-mouth. If breathing is difficult give oxygen. Get Medical attention. *Eyes:* In case of contact, immediately flush eyes with plenty of water for at least 15

minutes and get Medical attention.

**SECTION 6: REACTIVITY INFORMATION** 

Stability: Stable

Hazardous Polymerization: Will not occur.

**Hazardous Decomposition Products:** If stored and handled according to standard industrial practice none known. For the silicone content of the substance measurements have shown the formation of small amounts of formaldehyde at temperatures above 150°F through oxidation.

Incompatibility (Materials to avoid): None Known.

#### SECTION 7: SPILL OR LEAK PROCEDURES

Do not introduce into waters, sewage water or soil. Dam in any fluid that runs out using suitable material (earth). Spills of material that reaches waters must be reported to United States coast Guard National Response Centers toll free number 800 424 8802 Wear protective clothing.

**Waste Disposal Methods:** Incinerate liquid in approved equipment. Incinerate contaminated diking material in accordance with local, state and federal regulations. If small amounts absorb with a liquid binding material If large amount pump into suitable containers. Clean any slippery coating that remains using a cold cleaner (petroleum naphtha or a water/surefactant mix)

#### SECTION 8: SPECIAL PROTECTION INFORMATION

Ventilation Type: Normal room ventilation.

**Respiratory Protection:** None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH-approved or equivalent) suitable for concentrations and types of air contaminants encountered.

Protective Gloves: Impervious

**Eye Protection:** Chemical splash goggles(ANSI Z-871 or approved equivalent)

Other Protective Equipment: Evewash facility.

#### **SECTION 9: SPECIAL PRECAUTIONS**

Keep container tightly closed Protect against sun. Minimum temp allowed during storage and transportation 0°C 32°F.

**Note To Physician:** Allergic dermatitis or respiratory response in susceptible individuals may be delayed even weeks or months after frequent and/or prolonged contact. Acute effects can include mucosa damage, severe laryngeal edema, and shock associated with corrosive agents. Possible mucosa damage may contraindicate the use of gastric lavage.

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DATE PREPARED 12/20/89 REVISED 02/23/06

## MATERIAL SAFETY DATA SHEET COTRONICS

**DURASEAL 1529 UHT THINNER** 

**Manufactures Name: COTRONICS CORPORATION** 

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

**SECTION ONE** 

Chemical Name and Synonyms: Alkyl Silicone Resin

Chemical Formula: N/A
Chemical Family: Silicone
Comments: N/A

**SECTION 2: COMPOSITION INFORMATION** 

A. Hazardous Materials

Alpha-Isotridecyl-Omega-Hydroxy-Polyglycolether 0.25% - 1.25 %

CAS Registry No.: 9043-30-5

Toluene (trace amount) 0.0025%-0.25%

CAS Registry No108-88-3

All materials contained within are listed on the TSCA Inventory list.

This material is non hazardous under OSHA criteria

There are no carcinogenic ingredients present at or over 0.1% in this material This material contains between 0.005 and .05% of toluene identified as being a developmental reproductive toxin based on This product is compliant with the RoHS Directive.animal studies

**SECTION 3: PHYSICAL PROPERTY INFORMATION** 

Appearance: White Liquid Odor: Odorless

Melting or Freezing Point: -1°C, 30°F Boiling Point: -10°C, 212°F

Vapor Pressure: 17.25 mm Hg at 20°C (68°F)

Solubility In Water (20°F): Completely Miscible Density: 1.00 - 1.2 g/cm<sup>3</sup>

**pH Value** 5.5-6.5

SECTION 4: FIRE AND EXPLOSION HAZARD DATA

Flash Point:

Boiling Point:

Autoignition Temp.

Lower Explosion Limit (%):

N/A.

Upper Explosion Limit(%):

N/A.

**Extinguishing Media:** All Standard Firefighting Media.

Special Firefighting Procedures: NA

Material does not burn and does not present any unusual fire or explosion hazards.

**SECTION 5: HEALTH HAZARD DATA** 

**Effects of Overexposure:** *Inhalation:* Excessive inhalation causes headaches, dizziness, nausea and in coordination. Harmful if inhaled. *Eye Contact:* May cause eye irritation. *Skin Contact:* May cause skin irritation. *Ingestion:* Harmful if swallowed. Causes vomiting, nausea, and diarrhea.

No toxic effects are expected and no known physical hazards.

Chronic Effects of Over Exposure: None Expected.

**Emergency and First Aid Procedures:** 

**Ingestion:** If swallowed, do not induce vomiting. Give large quantities of water to drink and get medical attention. Never give anything by mouth to an unconscious person. **Skin:** Remove contaminated clothing and launder before reuse. Wash with soap and

water. Get medical attention if irritation persists.

*Inhalation:* If inhaled, remove to fresh air, if not breathing give artificial respiration, preferably mouth-to-mouth. If breathing is difficult give oxygen. Get Medical attention. *Eyes:* In case of contact, immediately flush eyes with plenty of water for at least 15

minutes and get Medical attention.

**SECTION 6: REACTIVITY INFORMATION** 

Stability: Stable

Hazardous Polymerization: Will not occur.

**Hazardous Decomposition Products:** If stored and handled according to standard industrial practice none known. For the silicone content of the substance measurements have shown the formation of small amounts of formaldehyde at temperatures above 150°F through oxidation.

Incompatibility (Materials to avoid): None Known.

#### **SECTION 7: SPILL OR LEAK PROCEDURES**

Do not introduce into waters, sewage water or soil. Dam in any fluid that runs out using suitable material (earth). Spills of material that reaches waters must be reported to United States coast Guard National Response Centers toll free number 800 424 8802 Wear protective clothing.

**Waste Disposal Methods:** Incinerate liquid in approved equipment. Incinerate contaminated diking material in accordance with local, state and federal regulations. If small amounts absorb with a liquid binding material If large amount pump into suitable containers. Clean any slippery coating that remains using a cold cleaner (petroleum naphtha or a water/surefactant mix)

#### SECTION 8: SPECIAL PROTECTION INFORMATION

**Ventilation Type:** Normal room ventilation.

**Respiratory Protection:** None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH-approved or equivalent) suitable for concentrations and types of air contaminants encountered.

Protective Gloves: Impervious

Eye Protection: Chemical splash goggles(ANSI Z-871 or approved equivalent)

Other Protective Equipment: Evewash facility.

#### **SECTION 9: SPECIAL PRECAUTIONS**

Keep container tightly closed Protect against sun. Minimum temp allowed during storage and transportation 0°C 32°F.

**Note To Physician:** Allergic dermatitis or respiratory response in susceptible individuals may be delayed even weeks or months after frequent and/or prolonged contact. Acute effects can include mucosa damage, severe laryngeal edema, and shock associated with corrosive agents. Possible mucosa damage may contraindicate the use of gastric lavage.

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DATE PREPARED 12/20/89 REVISED 02/23/06

Page 2 of 2

HIMS RATING Health = 1 Fire = 0 Reactivity = 0 HAZARD RATING: 0 = Insignificant 1 = Non-Toxic, Slight 2 = Moderate 3 = High 4 = Extreme

# MATERIAL SAFETY DATA SHEET COTRONICS DURASEAL 1529 UHT ADDENDUM

**Manufactures Name: COTRONICS CORPORATION** 

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

#### **SECTION ONE**

Chemical Name and Synonyms: Alkyl Silicone Resin

Chemical Formula: N/A
Chemical Family: Silicone
Comments: N/A

#### 14 Transport information

14.1 US DOT & CANADA TDG SURFACE

Valuation.....: Not regulated for transport Other Information.....: Protect from freezing.

14.2 Transport by sea IMDG-Code

Valuation...... Not regulated for transport

14.3 Air transport ICAO-TI/IATA-DGR

Valuation...... Not regulated for transport

## MATERIAL SAFETY DATA SHEET COTRONICS DURASEAL 1529 FS

**Manufactures Name: COTRONICS CORPORATION** 

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

#### **SECTION ONE**

Chemical Name and Synonyms: Alkyl Silicone Resin

Chemical Formula: N/A
Chemical Family: Silicone
Comments: N/A

#### 14 Transport information

14.1 US DOT & CANADA TDG SURFACE

Valuation...... Not regulated for transport Other Information...... Protect from freezing.

14.2 Transport by sea IMDG-Code

Valuation...... Not regulated for transport

14.3 Air transport ICAO-TI/IATA-DGR

Valuation...... Not regulated for transport

#### COTRONICS 1529 DURASEAL THINNER

**Manufactures Name: COTRONICS CORPORATION** 

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

**SECTION ONE** 

Chemical Name And Synonyms: Methylphenylsiloxane Solution

Chemical Formula: N/A
Chemical Family: Siloxane
Comments: N/A

**SECTION 2: COMPOSITION INFORMATION** 

A. Hazardous Materials

Toluene Acgih TLV: 100 Osha Pel: 200: ppm

CAS REG NO.: 108-88-3\* Approx. %: 90 - 100 %
All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

**SECTION 3: PHYSICAL PROPERTY INFORMATION** 

Appearance: Clear Liquid Odor: Aromatic PH: N/A

Melting Or Freezing Point: N/A

**Boiling Point:** 232 (°F) 111°C

Vapor Pressure ( 22.0 mm Hg) :( $20^{\circ}\text{C}$ )Vapor Density (AIR = 1) :3.2Solubility In Water ( $20^{\circ}\text{F}$ ) :Insoluble.

% Volatile (By Volume): 20

Solubility In Organic Solvent: Yes in Toluene.

Specific Gravity (Water 1): 1.14
Evaporation Rate (BUTYL Acetate = 1): 2

Density: 1138 MG/M<sup>3</sup>

**SECTION 4: FIRE AND EXPLOSION HAZARD DATA** 

Flash Point: >52°F.

Auto Ignition Temp: 997°F.

Lower Explosion Limit (%): N/A.

Upper Explosion Limit(%): N/A.

Flammable Limits In Air (%): Lower 1.2, Upper 7.0.

**Extinguishing Media:** All Standard Firefighting Media.

Special Firefighting Procedures: Flammable. Wear Respiratory Protection If In A

Confined Area.

**SECTION 5: HEALTH HAZARD DATA** 

**Effects Of Overexposure:** 

Inhalation: Excessive inhalation causes headaches, dizziness, nausea and in

coordination. Harmful if inhaled.

Eye Contact: Causes severe eye irritation. Skin Contact: Causes drying of the skin.

Ingestion: Harmful if swallowed. Causes vomiting, nausea, and diarrhea.

Medical Conditions Aggravated: Liver & Kidney

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**Chronic Effects Of Over Exposure:** Dermatitis, Liver & Kidney Damage. Flush with water for 15 minutes and get Medical attention if irritation persists.

**Emergency And First Aid Procedures:** 

**Ingestion:** If swallowed, do not induce vomiting. Give large quantities of water to drink and get medical attention. Never give anything by mouth to an unconscious person. **Skin:** Remove contaminated clothing and launder before reuse. Wash with soap and

water. Get medical attention if irritation persists.

*Inhalation:* If inhaled, remove to fresh air, if not breathing give artificial respiration, preferably mouth-to-mouth. If breathing is difficult give oxygen. Get Medical attention. *Eyes:* In case of contact, immediately flush eyes with plenty of water for at least 15

minutes and get Medical attention.

**SECTION 6: REACTIVITY INFORMATION** 

Stability: Stable

Hazardous Polymerization: Will not occur.

Hazardous Decomposition Products: Carbon Monoxide. Carbon Dioxide.

Formaldehyde.

Incompatibility (Materials To Avoid): None Known.

Conditions To Avoid: Keep away from heat, sparks and open flame. Avoid any

source of ignition.

**SECTION 7: SPILL OR LEAK PROCEDURES** 

Dike and absorb spill on inert material (sand, earth, etc.). Transfer diking material to containers for disposal. Wear protective clothing. Use breathing apparatus (MSHA/NIOSH-approved, pressure-demand, self-contained) or air mask for large spills in confined area. Wash clothing before reuse. Destroy clothing that cannot be decontaminated (i.e. shoes).

**Waste Disposal Methods:** Incinerate liquid in approved equipment. Landfill or incinerate contaminated diking material in accordance with local, state and federal regulations.

SECTION 8: SPECIAL PROTECTION INFORMATION

**Ventilation Type:** Normal room ventilation.

**Respiratory Protection:** None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH-approved or equivalent) suitable for concentrations and types of air contaminants encountered.

Protective Gloves: Impervious

**Eye Protection:** Chemical splash goggles(ANSI Z-871 or approved equivalent)

Other Protective Equipment: Eyewash facility.

SECTION 9: SPECIAL PRECAUTIONS

Store away from excessive heat (e.g., steam-pipes, radiators, from sources of ignition, and from reactive materials). Do not store near food or feed.

**Note To Physician:** Allergic dermatitis or respiratory response in susceptible individuals may be delayed even weeks or months after frequent and/or prolonged contact. Acute effects can include mucosa damage, severe laryngeal edema, and shock associated with corrosive agents. Possible mucosa damage may contraindicate the use of gastric lavage.

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## MATERIAL SAFETY DATA SHEET COTRONICS DURASEAL 1529 UHT

**Manufactures Name: COTRONICS CORPORATION** 

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

SECTION ONE

Chemical Name and Synonyms: Alkyl Silicone Resin

Chemical Formula: N/A
Chemical Family: Silicone
Comments: N/A

**SECTION 2: COMPOSITION INFORMATION** 

A. Hazardous Materials

Alpha-Isotridecyl-Omega-Hydroxy-Polyglycolether 0.5% - 2.5 %

CAS Registry No.: 9043-30-5

Toluene (trace amount) 0.005%-0.5%

CAS Registry No108-88-3

All materials contained within are listed on the TSCA Inventory list.

This material is non hazardous under OSHA criteria

There are no carcinogenic ingredients present at or over 0.1% in this material This material contains between 0.005 and .05% of toluene identified as being a developmental reproductive toxin based on This product is compliant with the RoHS Directive.animal studies

**SECTION 3: PHYSICAL PROPERTY INFORMATION** 

Appearance: White Liquid Odor: Odorless

Melting or Freezing Point: -1°C, 30°F Boiling Point: -10°C, 212°F

Vapor Pressure: 17.25 mm Hg at 20°C (68°F)

Solubility In Water (20°F): Completely Miscible Density: 1.04 - 1.5 g/cm<sup>3</sup>

pH Value 4-6

SECTION 4: FIRE AND EXPLOSION HAZARD DATA

Flash Point:

Boiling Point:

Autoignition Temp.

Lower Explosion Limit (%):

Upper Explosion Limit(%):

N/A.

**Extinguishing Media:** All Standard Firefighting Media.

Special Firefighting Procedures: NA

Material does not burn and does not present any unusual fire or explosion hazards.

**SECTION 5: HEALTH HAZARD DATA** 

**Effects of Overexposure:** *Inhalation:* Excessive inhalation causes headaches, dizziness, nausea and in coordination. Harmful if inhaled. *Eye Contact:* May cause eye irritation. *Skin Contact:* May cause skin irritation. *Ingestion:* Harmful if swallowed. Causes vomiting, nausea, and diarrhea.

No toxic effects are expected and no known physical hazards.

Chronic Effects of Over Exposure: None Expected.

**Emergency and First Aid Procedures:** 

**Ingestion:** If swallowed, do not induce vomiting. Give large quantities of water to drink and get medical attention. Never give anything by mouth to an unconscious person. **Skin:** Remove contaminated clothing and launder before reuse. Wash with soap and

water. Get medical attention if irritation persists.

*Inhalation:* If inhaled, remove to fresh air, if not breathing give artificial respiration, preferably mouth-to-mouth. If breathing is difficult give oxygen. Get Medical attention. *Eyes:* In case of contact, immediately flush eyes with plenty of water for at least 15

minutes and get Medical attention.

**SECTION 6: REACTIVITY INFORMATION** 

Stability: Stable

Hazardous Polymerization: Will not occur.

**Hazardous Decomposition Products:** If stored and handled according to standard industrial practice none known. For the silicone content of the substance measurements have shown the formation of small amounts of formaldehyde at temperatures above 150°F through oxidation.

Incompatibility (Materials to avoid): None Known.

#### **SECTION 7: SPILL OR LEAK PROCEDURES**

Do not introduce into waters, sewage water or soil. Dam in any fluid that runs out using suitable material (earth). Spills of material that reaches waters must be reported to United States coast Guard National Response Centers toll free number 800 424 8802 Wear protective clothing.

**Waste Disposal Methods:** Incinerate liquid in approved equipment. Incinerate contaminated diking material in accordance with local, state and federal regulations. If small amounts absorb with a liquid binding material If large amount pump into suitable containers. Clean any slippery coating that remains using a cold cleaner (petroleum naphtha or a water/surefactant mix)

#### SECTION 8: SPECIAL PROTECTION INFORMATION

**Ventilation Type:** Normal room ventilation.

**Respiratory Protection:** None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH-approved or equivalent) suitable for concentrations and types of air contaminants encountered.

Protective Gloves: Impervious

**Eye Protection:** Chemical splash goggles(ANSI Z-871 or approved equivalent)

Other Protective Equipment: Evewash facility.

#### **SECTION 9: SPECIAL PRECAUTIONS**

Keep container tightly closed Protect against sun. Minimum temp allowed during storage and transportation 0°C 32°F.

**Note To Physician:** Allergic dermatitis or respiratory response in susceptible individuals may be delayed even weeks or months after frequent and/or prolonged contact. Acute effects can include mucosa damage, severe laryngeal edema, and shock associated with corrosive agents. Possible mucosa damage may contraindicate the use of gastric lavage.

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DATE PREPARED 12/20/89 REVISED 02/23/06

## MATERIAL SAFETY DATA SHEET COTRONICS DURASEAL 1529FS

**Manufactures Name: COTRONICS CORPORATION** 

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

**SECTION ONE: CHEMICAL NAME** 

Chemical Name and Synonyms: Alkyl Silicone Resin

Chemical Formula: N/A
Chemical Family: Silicone
Comments: N/A

**SECTION 2: COMPOSITION INFORMATION** 

A. Hazardous Materials

Isotridecyl hydroxy polyglycol ether 1.0% - 10%

CAS Registry No.: 9043-30-5

Toluene (trace amount) 0.005%-0.5%

CAS Registry No108-88-3

All materials contained within are listed on the TSCA Inventory list.

This material is non hazardous under OSHA criteria

There are no carcinogenic ingredients present at or over 0.1% in this material This material contains between 0.005 and .05% of toluene identified as being a developmental reproductive toxin based on This product is compliant with the RoHS Directive.animal studies

SECTION 3: PHYSICAL PROPERTY INFORMATION

Appearance: White Liquid Odor: Odorless

Melting or Freezing Point: -1°C, 30°F Boiling Point: -10°C, 212°F

Vapor Pressure: 17.25 mm Hg at 20°C (68°F)

Solubility In Water (20°F): Completely Miscible Pensity: 1.04 - 1.5 g/cm<sup>3</sup>

pH Value 4-6

SECTION 4: FIRE AND EXPLOSION HAZARD DATA

Flash Point: NA

Boiling Point: 100°C
Autoignition Temp. 455°C
Lower Explosion Limit (%): N/A
Upper Explosion Limit(%): N/A

**Extinguishing Media:** All Standard Firefighting Media.

Special Firefighting Procedures: NA

Material does not burn and does not present any unusual fire or explosion hazards.

**SECTION 5: HEALTH HAZARD DATA** 

**Effects of Overexposure:** *Inhalation:* Excessive inhalation causes headaches, dizziness, nausea and in coordination. Harmful if inhaled. *Eye Contact:* May cause eye irritation. *Skin Contact:* May cause skin irritation. *Ingestion:* Harmful if swallowed. Causes vomiting, nausea, and diarrhea.

No toxic effects are expected and no known physical hazards.

Chronic Effects of Over Exposure: None Expected.

**Emergency and First Aid Procedures:** 

**Ingestion:** If swallowed, do not induce vomiting. Give large quantities of water to drink and get medical attention. Never give anything by mouth to an unconscious person. **Skin:** Remove contaminated clothing and launder before reuse. Wash with soap and

water. Get medical attention if irritation persists.

**Inhalation:** If inhaled, remove to fresh air, if not breathing give artificial respiration, preferably mouth-to-mouth. If breathing is difficult give oxygen. Get Medical attention. **Eyes:** In case of contact, immediately flush eyes with plenty of water for at least 15

minutes and get Medical attention.

**SECTION 6: REACTIVITY INFORMATION** 

Stability: Stable

Hazardous Polymerization: Will not occur.

**Hazardous Decomposition Products:** If stored and handled according to standard industrial practice none known. For the silicone content of the substance measurements have shown the formation of small amounts of formaldehyde at temperatures above 150°F through oxidation.

Incompatibility (Materials to avoid): None Known.

#### **SECTION 7: SPILL OR LEAK PROCEDURES**

Do not introduce into waters, sewage water or soil. Dam in any fluid that runs out using suitable material (earth). Spills of material that reaches waters must be reported to United States coast Guard National Response Centers toll free number 800 424 8802 Wear protective clothing.

Waste Disposal Methods: Incinerate liquid in approved equipment. Incinerate contaminated diking material in accordance with local, state and federal regulations. If small amounts absorb with a liquid binding material If large amount pump into suitable containers. Clean any slippery coating that remains using a cold cleaner (petroleum naphtha or a water/surefactant mix)

#### **SECTION 8: SPECIAL PROTECTION INFORMATION**

**Ventilation Type:** Normal room ventilation.

**Respiratory Protection:** None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH-approved or equivalent) suitable for concentrations and types of air contaminants encountered.

Protective Gloves: Impervious

Eye Protection: Chemical splash goggles(ANSI Z-871 or approved equivalent)

Other Protective Equipment: Evewash facility.

#### **SECTION 9: SPECIAL PRECAUTIONS**

Keep container tightly closed Protect against sun. Minimum temp allowed during storage and transportation 0°C 32°F.

**Note To Physician:** Allergic dermatitis or respiratory response in susceptible individuals may be delayed even weeks or months after frequent and/or prolonged contact. Acute effects can include mucosa damage, severe laryngeal edema, and shock associated with corrosive agents. Possible mucosa damage may contraindicate the use of gastric lavage.

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DATE PREPARED 12/20/89 REVISED 02/23/06

## MATERIAL SAFETY DATA SHEET COTRONICS

**DURASEAL 1529 UHT THINNER** 

**Manufactures Name: COTRONICS CORPORATION** 

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

**SECTION ONE** 

Chemical Name and Synonyms: Alkyl Silicone Resin

Chemical Formula: N/A
Chemical Family: Silicone
Comments: N/A

**SECTION 2: COMPOSITION INFORMATION** 

A. Hazardous Materials

Alpha-Isotridecyl-Omega-Hydroxy-Polyglycolether 0.25% - 1.25 %

CAS Registry No.: 9043-30-5

Toluene (trace amount) 0.0025%-0.25%

CAS Registry No108-88-3

All materials contained within are listed on the TSCA Inventory list.

This material is non hazardous under OSHA criteria

There are no carcinogenic ingredients present at or over 0.1% in this material This material contains between 0.005 and .05% of toluene identified as being a developmental reproductive toxin based on This product is compliant with the RoHS Directive.animal studies

**SECTION 3: PHYSICAL PROPERTY INFORMATION** 

Appearance: White Liquid Odor: Odorless

Melting or Freezing Point: -1°C, 30°F Boiling Point: -10°C, 212°F

Vapor Pressure: 17.25 mm Hg at 20°C (68°F)

Solubility In Water (20°F): Completely Miscible Density: 1.00 - 1.2 g/cm<sup>3</sup>

**pH Value** 5.5-6.5

SECTION 4: FIRE AND EXPLOSION HAZARD DATA

Flash Point:

Boiling Point:

Autoignition Temp.

Lower Explosion Limit (%):

Upper Explosion Limit(%):

N/A.

**Extinguishing Media:** All Standard Firefighting Media.

Special Firefighting Procedures: NA

Material does not burn and does not present any unusual fire or explosion hazards.

**SECTION 5: HEALTH HAZARD DATA** 

**Effects of Overexposure:** *Inhalation:* Excessive inhalation causes headaches, dizziness, nausea and in coordination. Harmful if inhaled. *Eye Contact:* May cause eye irritation. *Skin Contact:* May cause skin irritation. *Ingestion:* Harmful if swallowed. Causes vomiting, nausea, and diarrhea.

No toxic effects are expected and no known physical hazards.

Chronic Effects of Over Exposure: None Expected.

**Emergency and First Aid Procedures:** 

**Ingestion:** If swallowed, do not induce vomiting. Give large quantities of water to drink and get medical attention. Never give anything by mouth to an unconscious person. **Skin:** Remove contaminated clothing and launder before reuse. Wash with soap and

water. Get medical attention if irritation persists.

*Inhalation:* If inhaled, remove to fresh air, if not breathing give artificial respiration, preferably mouth-to-mouth. If breathing is difficult give oxygen. Get Medical attention. *Eyes:* In case of contact, immediately flush eyes with plenty of water for at least 15

minutes and get Medical attention.

**SECTION 6: REACTIVITY INFORMATION** 

Stability: Stable

Hazardous Polymerization: Will not occur.

**Hazardous Decomposition Products:** If stored and handled according to standard industrial practice none known. For the silicone content of the substance measurements have shown the formation of small amounts of formaldehyde at temperatures above 150°F through oxidation.

Incompatibility (Materials to avoid): None Known.

#### **SECTION 7: SPILL OR LEAK PROCEDURES**

Do not introduce into waters, sewage water or soil. Dam in any fluid that runs out using suitable material (earth). Spills of material that reaches waters must be reported to United States coast Guard National Response Centers toll free number 800 424 8802 Wear protective clothing.

**Waste Disposal Methods:** Incinerate liquid in approved equipment. Incinerate contaminated diking material in accordance with local, state and federal regulations. If small amounts absorb with a liquid binding material If large amount pump into suitable containers. Clean any slippery coating that remains using a cold cleaner (petroleum naphtha or a water/surefactant mix)

#### SECTION 8: SPECIAL PROTECTION INFORMATION

Ventilation Type: Normal room ventilation.

**Respiratory Protection:** None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH-approved or equivalent) suitable for concentrations and types of air contaminants encountered.

Protective Gloves: Impervious

**Eye Protection:** Chemical splash goggles(ANSI Z-871 or approved equivalent)

Other Protective Equipment: Evewash facility.

#### **SECTION 9: SPECIAL PRECAUTIONS**

Keep container tightly closed Protect against sun. Minimum temp allowed during storage and transportation 0°C 32°F.

**Note To Physician:** Allergic dermatitis or respiratory response in susceptible individuals may be delayed even weeks or months after frequent and/or prolonged contact. Acute effects can include mucosa damage, severe laryngeal edema, and shock associated with corrosive agents. Possible mucosa damage may contraindicate the use of gastric lavage.

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HIMS RATING Health = 1 Fire = 0 Reactivity = 0 HAZARD RATING: 0 = Insignificant 1 = Non-Toxic, Slight 2 = Moderate 3 = High 4 = Extreme

# MATERIAL SAFETY DATA SHEET COTRONICS DURASEAL 1529 UHT ADDENDUM

**Manufactures Name: COTRONICS CORPORATION** 

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

#### **SECTION ONE**

Chemical Name and Synonyms: Alkyl Silicone Resin

Chemical Formula: N/A
Chemical Family: Silicone
Comments: N/A

#### 14 Transport information

14.1 US DOT & CANADA TDG SURFACE

Valuation.....: Not regulated for transport Other Information.....: Protect from freezing.

14.2 Transport by sea IMDG-Code

Valuation...... Not regulated for transport

14.3 Air transport ICAO-TI/IATA-DGR

Valuation...... Not regulated for transport

## MATERIAL SAFETY DATA SHEET COTRONICS DURASEAL 1529 FS

**Manufactures Name: COTRONICS CORPORATION** 

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

#### **SECTION ONE**

Chemical Name and Synonyms: Alkyl Silicone Resin

Chemical Formula: N/A
Chemical Family: Silicone
Comments: N/A

#### 14 Transport information

14.1 US DOT & CANADA TDG SURFACE

Valuation...... Not regulated for transport Other Information...... Protect from freezing.

14.2 Transport by sea IMDG-Code

Valuation...... Not regulated for transport

14.3 Air transport ICAO-TI/IATA-DGR

Valuation...... Not regulated for transport

#### Cotronics 1530 Ceramic Sealer **Two Component**

#### Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

#### **SECTION 1: PRODUCT IDENTIFICATION**

**Chemical Name And Synonyms:** N/A Mixture **Chemical Family:** Alumina or Silica

Chemical Formula: N/A

#### SECTION 2: COMPOSITION INFORMATION

W I. %	I VL/PEL
100	5 mg/ Cu M
100	N/A
mina Colloid	Binder
on the TSC	A Inventory list.
	100 100 mina Colloid

This product is compliant with the RoHS Directive.

**DOT ID.. Number:** Not Regulated.

#### **SECTION 3: PHYSICAL DATA**

	As Supplied	Cured
Boiling Point (°F):	212	N/A
Vapor Density (Air = 1):	>1	N/A
Specific Gravity Range (H2O = 1)	) <i>:</i> 1.5-3	1.2-2.5
Percent Volatile by Volume:	20-50	N/A
(%) Solubility in Water:	Soluble	Insoluble
Evaporation Rate (H2O = 1):	1	N/A
Appearance and Odor: (	Creamy Paste No Odor.	Solid
Vapor Pressure (mm Hg.) :	17	N/A

#### SECTION 4: FIRE AND EXPLOSION HAZARD DATA

Extinguishing Media Flash Point: N/A (Method Used): N/A

Flammable Limit: N/A

**Unusual Fire And Explosive Hazards:** 

LEL: N/A UEL: N/A

Special Fire Fighting Procedures: N/A

#### **SECTION 5: HEALTH HAZARD DATA**

#### Effects of Overexposure:

Slight dermatological irritation after prolonged skin contact.

Emergency And First Aid Procedures: Flush eyes and skin with copious quantities of water. Get immediate medical attention for eyes. If swallowed, consult physician immediately.

#### SECTION 6: FIRE, EXPLOSIVE AND REACTIVITY DATA

Stability: Stable

Incompatibility (Materials to Avoid): Powdered aluminum metal.

Hazardous Decomposition Products: None.

**Hazardous Polymerization:** Will Not Occur.

#### SECTION 7: SPILL OR LEAK PROCEDURES

#### Steps To Be Taken In Case Material Is Released or Spilled:

Sweep up spilled powder and dispose in approved industrial waste container. Hose spilled wet cement paste with water, immediately. Cement is not water soluble after setting up. Note Liquid is mild acid.

Waste Disposal Method: Approved industrial waste disposal means.

#### **SECTION 8: SPECIAL PROTECTION INFORMATION**

**Respiratory Protection (Specify Type):** NIOSH approved\*. Respirators recommended for spray applications.

Ventilation: Local Exhaust:

Vacuuming with the vacuum exhaust passing through a high efficiency particulate arresting (HEPA) filter as the exhaust is discharged into the workplace.

Protective Gloves: Recommended. Eve Protection: Recommended.

Other Protective Equipment: Rubber aprons, lab coats, etc. to protect clothing.

#### **SECTION 9: SPECIAL PRECAUTIONS**

Precautions to Be Taken in Handling and Storing: Keep container closed and avoid getting wet until ready to use.

Other precautions: wash hands thoroughly before eating or smoking. Avoid getting powder in body openings, including cuts, sores, mouth, etc.

#### Precautions To Be Taken After Use And Upon Removal:

This product as manufactured contains an aluminosilicate which could transform upon heating to mullet and crystobalite (a form of crystalline silica). Removal of this product after use may result in the generation of dust. Repeated inhalation of respirable free crystalline silica dust may cause delayed lung injury (silicosis). The recommended TLV/PEL for free crystalline silica is derived from the formula: 10 mg/cu m

1/2(----)#

% Respirable quartz + 2

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<sup>\*(</sup>Reference 1984-85 ACGIH TLV Booklet, Page 34). Appropriate ventilation should be provided and protective equipment should be worn in compliance with OSHA standard currently 29 CFR 1910.134 (NIOSH approved, air purifying, half mask or full face-piece respirator with appropriate filter pad or cartridge(s)).

#### **MATERIAL SAFETY DATA SHEET Cotronics Corporation**

#### 1531 Silicone Sealer

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

#### **SECTION ONE**

**Chemical Name And Synonyms:** N/A Mixture

Chemical Family: Proprietary Silicone

Chemical Formula: N/A

When exposed to moisture 5-10% methylethylketoxome may be formed.

\*All materials contained are listed on the EPA TOSCA INVENTORY LIST.

DOT I.D Number: Not Regulated.

#### **SECTION 2: COMPOSITION INFORMATION**

As Manufactured	CAS	ACGIH (TLV)	OSHA (PEL)	OTHER
Modified Silicon Dioxide	68611449	10mg/m3	6mg/m3	6mg/m3
Iron Oxide (Fe)	1309371	5mg/m <sub>3</sub>	10mg/m3	None
Silica, Mica (respirable)	12001262	3mg/m <sub>3</sub>	3mg/m3	None
Methyl ethyl Ketoxime	96297	None	None	10 ppm
All materials contained within are listed on the TSCA Inventory list.				
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This product is compliant with the RoHS Directive.

#### **SECTION 3: PHYSICAL DATA**

As Supplied N/A Polymeric Boiling Point (°F):

Vapor Density (Air = 1): 3.0 Specific Gravity Range (H2O = 1): 1.0

Percent volatile by Volume (EPA method 24): 56 grams per liter (%) Solubility in Water: Polymerized

Evaporation Rate (H<sub>2</sub>O = 1):

Appearance and Odor: Gold Colored Paste, Mild Odor

Vapor Pressure (mm Hg.): Less than 5 mm

#### SECTION 4: FIRE AND EXPLOSION HAZARD DATA

Extinguishing Media:

Flash Point (tag closed cup): >200°F Flammable Limit.

Special Fire Fighting Procedures:

Extinguishing Agents: Carbon Dioxide, Foam Dry Chemical.

Unusual Fire and Explosive Hazards:

Explosive limits (% By Volume In Air): LEL 2.6% Ferric Oxide, 6% Methanol

UEL 12.5% Ferric Oxide, 36% Methanol

#### **SECTION 5: HEALTH HAZARD DATA**

#### Effects Of Overexposure:

Slight dermatological irritation after prolonged skin contact. Moderately toxic by ingestion. When heated to 300°F in presence of air can form formaldehyde vapors which are a potential cancer hazard and known irritant to the skin and eyes. Keep vapors below OSHA limits via ventilation.

#### **Emergency And First Aid Procedures:**

Flush eyes and skin with copious quantities of water. Get immediate medical attention for eyes. If swallowed, consult physician immediately. Do not induce vomiting.

#### SECTION 6: FIRE, EXPLOSIVE AND REACTIVITY DATA

Stability: Stable.

Incompatibility (Materials to Avoid): Strong oxidizers polymerized by contact with

moisture.

Hazardous Decomposition Products: Fire Formaldehyde. Silica Fume. Oxides Of

Carbon Hazardous Decomposition non thermal: Methyl ethyl ketoxime.

Hazardous Polymerization: Will Not Occur.

#### SECTION 7: SPILL OR LEAK PROCEDURES

#### Steps To Be Taken in Case Material is Released or Spilled:

Wipe or Scrape up spilled materials. Maintain good ventilation for large spills. Place scrap materials in a well ventilated place and allow to cure to rubber.

#### Waste Disposal Method:

Approved industrial waste disposal means. Follow local regulations.

#### SECTION 8: SPECIAL PROTECTION INFORMATION

**Ventilation:** Local Exhaust maintaining vapors lower than the TVL limit.

Skin: Rubber Or Plastic Gloves. Eve Protection: Recommended.

Other Protective Equipment: Rubber aprons. lab coats, etc. to protect clothing.

#### **SECTION 9: SPECIAL PRECAUTIONS**

Precautions To Be Taken In Handling and Storing: Keep container closed and avoid getting wet until ready to use.

Other Precautions: Wash Hands Thoroughly Before Eating Or Smoking.

Warning: This product contains a chemical or chemicals known to the state of California to a cause cancer or cause birth defects or other reproductive harm. 22 Cal code 12601 b 5

Disclaimer: The information supplied is not to be taken as a warranty or representation for which Cotronics Corp. assumes legal responsibility. It is offered solely for your consideration, investigation and verification. all risk of use, singly or in combination with other products, whether or not in accordance with the instructions, directions, or suggestions is borne by the user.

#### DATE PREPARED 09/01/93 DATE REVISED 02/23/06

HIMS RATING Health = 1 Fire = 1 Reactivity = 0

HAZARD RATING: 0 = Insignificant 1 = Non-Toxic, Slight 2 = Moderate 3 = High 4 = Extreme

<sup>\*(</sup>Reference 1984-85 ACGIH TLV Booklet, Page 34). Appropriate ventilation should be provided and protective equipment should be worn in compliance with OSHA standard currently 29 CFR 1910.134 (NIOSH approved, air purifying, half mask or full face-piece respirator with appropriate filter pad or cartridge(s)).

#### Cotronics 1532 Silicone Sealer

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

#### **SECTION ONE**

Chemical Name And Synonyms: N/A Mixture

Chemical Family: Proprietary Silicone

Chemical Formula: N/A

All materials contained are listed on the EPA TOSCA INVENTORY LIST.

DOT ID. Number: Not Regulated.

#### **SECTION 2: COMPOSITION INFORMATION**

As Manufactured CAS ACGIH (TLV) OSHA (PEL)

Methyltrimethoxysilane 1-5 % 1185-55-3 200 ppm 200 ppm

Trade Secret Component 1-5 % 25 ppm 35 STEL ppm

All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

#### **SECTION 3: PHYSICAL DATA**

Boiling Point (°F):

Vapor Density (Air = 1):

As Supplied
N/A Polymeric
3.0

Specific Gravity Range (H2O = 1): 3.0

Percent volatile by Volume (EPA method 24): 56 grams per liter (%) Solubility in Water: Polymerized Evaporation Rate (H2O = 1): 1

Appearance and Odor: Translucent Paste, Mild Odor

Vapor Pressure (mm Hg.):

VOC (EPA METH. 24) (G/L):

Solubility in Organic Solvent (State Solvent):

Less than 5 mm
Less than 5%
Toluene

#### SECTION 4: FIRE AND EXPLOSION HAZARD DATA

Extinguishing Media: Flash Point: 110°C 230 °F

Method: Pensk. Ignition Temp: NA

**Unusual Fire and Explosive Hazards:** 

Explosive limits (% By Volume In Air): LEL N/A UEL N/A

Sensitivity to Mechanical Impact (Y/N): No

Sensitivity to Static Discharge: Sensitivity to static discharge is not expected.

Extinguishing Media: All standard firefighting media.

#### **SECTION 5: HEALTH HAZARD DATA**

Ingestion: May be harmful if swallowed.

**Skin Contact:** Uncured product contact may irritate the skin.

Inhalation: Causes moderate respiratory irritation. Applies only in uncured state.

**Eve Contact:** Uncured product contact irritates eves.

**Chronic Effects/Carcinogenicity:** This product or one of its ingredients present 0.1% or more is NOT listed as a carcinogen or suspected carcinogen by NTP, IARC, or OSHA.

#### **SECTION 6: EMERGENCY AND FIRST AID PROCEDURES**

**Ingestion:** Do not induce vomiting. Slowly dilute with 1-2 glasses of water or milk and seek medical attention. Never give anything by mouth to an unconscious person. **Skin:** To clean from skin, remove completely with a dry cloth or paper towel, before washing with detergent and water. Get medical attention if irritation persists.

**Inhalation:** Move person to fresh air.

*Eyes:* In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention if irritation persists.

#### **SECTION 7: FIRE, EXPLOSIVE AND REACTIVITY DATA**

Stability: Stable.

Incompatibility (Materials to Avoid): None known.

Hazardous Decomposition Products: Carbon Monoxide, Carbon Dioxide, Silicon

Dioxide, Methanol, Ammonia, Formaldehyde. *Hazardous Polymerization:* Will Not Occur.

Conditions to Avoid: None known.

#### **SECTION 8: SPILL OR LEAK PROCEDURES**

#### Steps To Be Taken In Case Material Is Released Or Spilled:

Wipe, scrape or soak up in an inert material and put in a container for disposal. Washing walking surfaces with detergent and water to reduce slipping hazard. Wear proper protective equipment as specified in the protective equipment section.

Waste Disposal Method:

Approved industrial waste disposal means. Follow local regulations.

#### **SECTION 9: SPECIAL PROTECTION INFORMATION**

**Ventilation:** Local Exhaust maintaining vapors lower than the TVL limit.

Skin: Rubber, Plastic, Or Cloth Gloves.

Eve Protection: Safety glasses.

Other Protective Equipment: Wear eye protection and protective clothing.

Ventilation: Use only in well ventilated area.

#### SECTION 10: SPECIAL PRECAUTIONS

**Precautions To Be Taken In Handling and Storing:** Keep container closed when not in use. Avoid contact with skin and eyes. Use mechanical ventilation to stay below TLV of 25 ppm ammonia. Product releases ammonia during application and curing. **Other Precautions:** Wash Hands Thoroughly Before Eating or Smoking.

*Warning:* This product contains a chemical or chemicals known to the state of California to a cause cancer or cause birth defects or other reproductive harm.

22 Cal code 12601 b 5

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#### DATE PREPARED 09/01/97 DATE REVISED 02/23/06

<sup>\*(</sup>Reference 1984-85 ACGIH TLV Booklet, Page 34). Appropriate ventilation should be provided and protective equipment should be worn in compliance with OSHA standard currently 29 CFR 1910.134 (NIOSH approved, air purifying, half mask or full face-piece respirator with appropriate filter pad or cartridge(s)).

## Cotronics 1533 5 Minute Silicone Casting Compound

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996 This product is compliant with the RoHS Directive.

**SECTION 1: PRODUCT IDENTIFICATION** 

Chemical Name and Synonyms: N/A Mixture

Chemical Family: Two part polyvinylsiloxane (addition type platinum catalyst)

Chemical Formula: N/A

**SECTION 2: HAZARDOUS INGREDIENTS** 

Material: No hazardous ingredients listed by OSHA or ACGIH

Threshold Value: TLV None established by OSHA Nature of Hazard: Mild irritant to skin and eyes.

**SECTION 3: PHYSICAL DATA** 

Boiling Point (°F):

Melting Point (°F):

Vapor Density (Air = 1):

N/A

N/A

Specific Gravity Range (H2O = 1): 1.15 g/cc @25C

Percent volatile by Volume (EPA method 24):

(%) Solubility in Water:

Evaporation Rate (H2O = 1):

Vapor Pressure (mm Hg.):

VOC (EPA METH. 24) (G/L):

Nil

Negligible

N/A

Negligable

N/A

Appearance and Odor: Part A White Opaque viscous liquid

Part B Green Opaque viscous liquid

Slight Odor

**SECTION 4: FIRE AND EXPLOSION HAZARD DATA** 

Flash Point: Over 200°F

Method: TOC

*Ignition Temp:* N/A Material is non flammable. *Unusual Fire and Explosive Hazards:* None

Explosive limits (% By Volume In Air): LEL N/A UEL N/A

Extinguishing Media: All standard firefighting media. (Carbon Dioxide. Dry Chemical, Water)

**SECTION 5: HEALTH HAZARD DATA** 

*Ingestion:* May be harmful if swallowed. Stomach Upset and Diarrhea.

Skin Contact: Uncured product contact may irritate the skin.

Inhalation: Not expected in normal use.

Eye Contact: Uncured product contact irritates eyes.

Chronic Effects/Carcinogenicity: No ingredients identified as a carcinogen or a suspected

carcinogen by NTP, IARC, or OSHA.

**SECTION 6: EMERGENCY AND FIRST AID PROCEDURES** 

**Ingestion:** Do not induce vomiting. Slowly dilute with 1-2 glasses of water or milk and seek medical attention. Never give anything by mouth to an unconscious person. **Skin:** To clean from skin, remove completely with a dry cloth or paper towel, before washing with detergent and water. Get medical attention if irritation persists.

Inhalation: Move person to fresh air.

Eyes: In case of contact, immediately flush eyes with plenty of water for at least 15

minutes and get medical attention if irritation persists.

SECTION 7: FIRE, EXPLOSIVE AND REACTIVITY DATA

**Stability:** stable under normal conditions.

Incompatibility (Materials to Avoid): water, strong acids and bases, powdered metals

Hazardous decomposition products: Carbon Dioxide, Silicon Dioxide

Hazardous polymerization: will not occur.

Conditions to avoid: none known.

**SECTION 8: SPILL OR LEAK PROCEDURES** 

Steps to be taken in case material is released or spilled:

Wipe, scrape or soak up in an inert material and put in a container for disposal. Washing walking surfaces or residual product with ethyl alcohol or other appropriate solvent to reduce slipping or other hazards. Wear proper protective equipment as specified in the protective equipment section.

Waste disposal method: Approved industrial waste disposal means. Follow local

regulations.

SECTION 9: SPECIAL PROTECTION INFORMATION

Ventilation: Local exhaust.

**Skin:** Rubber, plastic or cloth gloves. **Eye Protection:** Safety glasses.

Other Protective Equipment: Wear eye protection and protective clothing.

Ventilation: Use only in well ventilated area.

**SECTION 10: SPECIAL PRECAUTIONS** 

**Precautions To Be Taken In Handling and Storing:** Keep container closed when not in use. Store in cooled, dry well ventilated area. Avoid contact with skin and eyes. Keep away from children.

Other Precautions: Wash hands thoroughly before eating or smoking.

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DATE PREPARED 09/01/97 DATE REVISED 02/23/06

## MATERIAL SAFETY DATA SHEET COTRONICS EPOXY RESINS

#### DURALCO 4400 DURALCO 4460 DURALCO 4460 HT DURALCO 4461 DURALCO 4462

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

#### **SECTION ONE**

Chemical Name And Synonyms: N/A Mixture

Chemical Formula: N/A

Chemical Family: Proprietary Modified Epoxy Resin

All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

**SECTION 2: PHYSICAL PROPERTY INFORMATION** 

**Boiling Point:** >400°F

Vapor Density (Air=1): >1

Solubility In Water:Negligible% Volatile (By Weight):NegligibleSpecific Gravity (Water=1):1.16Vapor Pressure (mm Hg):760mmMelting Or Freezing Point:<40°F</td>

Evaporation Rate (Butvl Acetate=1): <1

Appearance/Odor: Amber Transparent Liquid To Viscous Black Liquid.

#### **SECTION 3: FIRE AND EXPLOSION HAZARD DATA**

Flash Point: >295°F Auto Ignition Temp: N/A Lower Explosion Limit (%): N/A

Upper Explosion Limit (%): N/A

Extinguishing Media: Foam, C02, Dry Chemical: Water Spray

#### **SECTION 4: HEALTH HAZARD DATA**

#### **Effects Of Overexposure:**

*Inhalation:* Mist or vapor can irritate the nose and throat.

**Eve Contact:** Substantially irritating to eyes.

Skin Contact: Substance is moderately irritating and can cause superficial burns after

prolonged contact. Not absorbed in toxic amounts.

Ingestion: Harmful if swallowed.

**Delayed Effects:** Prolonged or repeated exposure can cause allergic reaction.

DATE PREPARED: 11/01/85 DATE REVISED: 02/23/06

#### **SECTION 5: EMERGENCY AND FIRST AID PROCEDURES**

**Inhalation:** Move subject to fresh air. Give artificial respiration if breathing has stopped. **Eye And Skin Contact:** Flush eyes with a large amount of water for at least 15 minutes. Get prompt medical attention. Wash skin thoroughly with soap and water. Remove and wash clothing before reuse.

**Ingestion:** If swallowed dilute by giving 2 glasses of water to drink. See a physician. Never give anything by mouth to an unconscious person.

#### **SECTION 6: REACTIVITY INFORMATION**

Stability: Stable

Hazardous Polymerization: Will Not Occur

#### SECTION 7: SPILL OR LEAK PROCEDURES

Dike and absorb spill on inert material (sand, earth, etc.). Transfer diking material to containers for disposal. Wear protective clothing. Use breathing apparatus (MSHA/NIOSH approved, pressure-demand, self-contained) or air mask for large spills in confined area. Wash clothing before reuse. Destroy clothing that cannot be decontaminated (i.e. Shoes).

**Waste Disposal Methods:** Incinerate liquid in approved equipment. Landfill or incinerate contaminated diking material in accordance with local, state and federal regulations.

#### **SECTION 8: SPECIAL PROTECTION INFORMATION**

**Ventilation Type:** Normal room ventilation.

**Respiratory Protection:** None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH approved or equivalent) suitable for concentrations and types of air contaminants encountered.

Protective Gloves: Impervious.

Eye Protection: Chemical splash goggles (ANSI Z-871 or approved equivalent).

Other Protective Equipment: Eyewash facility.

#### **SECTION 9: SPECIAL PRECAUTIONS**

Store away from excessive heat (e.g., steam-pipes, radiators, from sources of ignition, and from reactive materials). Do not store near food or feed.

Corrosive Material: Avoid all eve and skin contact.

*Misc Info:* The use of this and auxiliary materials should be confined to designated work areas. Emptied containers may still contain hazardous residues.

**Note To Physician:** Allergic dermatitis or respiratory response in susceptible individuals may be delayed even weeks or months after frequent and/or prolonged contact. Acute effects can include mucosa damage, severe laryngeal edema, and shock associated with corrosive agents. Possible mucosa damage may contraindicate the use of gastric lavage.

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## MATERIAL SAFETY DATA SHEET COTRONICS EPOXY HARDENERS

#### DURALCO 4400 DURALCO 4460 DURALCO 4460 HT DURALCO 4461 DURALCO 4462

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

#### SECTION ONE:

Chemical Name And Synonyms: N/A Mixture\*

Formula: N/A

**Chemical Family:** 4460 and 4460Ht - Acid Anhydride

4400, 4461, 4462 - Amine Complex

#### **SECTION 2: PHYSICAL PROPERTY INFORMATION**

Boiling Point: N/A Vapor Density (Air=1): >1

Solubility In Water:Negligible% Volatile (By Weight):NegligibleMelting Or Freezing Point:N/AVapor Pressure (mm Hg):N/ASpecific Gravity (Water=1):0.93 - 1.30

Evaporation Rate (Butyl Acetate=1): <1

Appearance/Odor: Off white opaque amber liquid/Amine odor

All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

#### SECTION 3: FIRE AND EXPLOSION HAZARD DATA

Flash Point: >200°F
Auto Ignition Temp: N/A
Lower Explosion Limit (%): N/A
Upper Explosion Limit (%): N/A

Extinguishing Media: Foam, C02, Dry Chemical: Water Spray

#### **SECTION 4: HEALTH HAZARD DATA**

#### **Effects Of Overexposure:**

Inhalation: Mist/Vapor can irritate the nose and throat.

Eye Contact: Substantially irritating to eyes.

Skin Contact: Substance is moderately irritating and can cause superficial burns after

prolonged contact.

Ingestion: Harmful if swallowed.

**Delayed Effects:** Prolonged or repeated exposure can cause allergic reaction.

#### DATE PREPARED: 11/01/85 DATE REVISED: 02/23/06

Never give anything by mouth to an unconscious person.

#### SECTION 6: REACTIVITY INFORMATION

*Ingestion:* If swallowed dilute by giving 2 glasses of water to drink. See a physician.

*Inhalation:* Move subject to fresh air. Give artificial respiration if breathing has stopped.

**Eye And Skin Contact:** Flush eyes with a large amount of water for at least 15 minutes. Get prompt medical attention. Wash skin thoroughly with soap and water.

**SECTION 5: EMERGENCY AND FIRST AID PROCEDURES** 

Stability: Stable

Remove and wash clothing before reuse.

Hazardous Polymerization: Will not occur

#### SECTION 7: SPILL OR LEAK PROCEDURES

Dike and absorb spill on inert material (sand, earth, etc.). Transfer diking material to containers for disposal. Wear protective clothing. Use breathing apparatus (MSHA/NIOSH approved, pressure-demand, self-contained) or air mask for large spills in confined area. Wash clothing before reuse. Destroy clothing that cannot be decontaminated (i.e. Shoes).

**Waste Disposal Methods:** Incinerate liquid in approved equipment. Landfill or incinerate contaminated diking material in accordance with local, state and federal regulations.

#### **SECTION 8: SPECIAL PROTECTION INFORMATION**

**Ventilation Type:** Normal room ventilation.

**Respiratory Protection:** None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH approved or equivalent) suitable for concentrations and types of air contaminants encountered.

Protective Gloves: Impervious.

Eve Protection: Chemical splash goggles (ANSI Z-871 or approved equivalent).

Other Protective Equipment: Eyewash facility.

#### **SECTION 9: SPECIAL PRECAUTIONS**

Store away from excessive heat (e.g., steam-pipes, radiators, from sources of ignition, and from reactive materials). Do not store near food or feed. Avoid all eye and skin contact.

*Misc Info:* The use of this and auxiliary materials should be confined to designated work areas. Emptied containers may still contain hazardous residues.

**Note To Physician:** Allergic dermatitis or respiratory response in susceptible individuals may be delayed even weeks or months after frequent and/or prolonged contact. Acute effects can include mucosa damage, severe laryngeal edema, and shock associated with corrosive agents. Possible mucosa damage may contraindicate the use of gastric layage.

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HIMS RATING Health = 2 Fire = 0 Reactivity = 0 HAZARD RATING: 0 = Insignificant 1 = Non-Toxic, Slight 2 = Moderate 3 = High 4 = Extreme

## MATERIAL SAFETY DATA SHEET COTRONICS EPOXIES

#### SINGLE COMPONENT DURALCO 4420 - DURALCO 455

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

#### **SECTION ONE**

Chemical Name and Synonyms: N/A Mixture

Chemical Formula: N/A

Chemical Family: Proprietary Modified Epoxy Resin

#### **SECTION 2: COMPOSITION INFORMATION**

Material:	WT. %	CAS	TLV/PEL	Ld <sub>50</sub> Oral
Proprietary Modified Epoxy Resin	40-60%	Novolac Resin	N/A	4000 mg/kg rabbit
Aluminum Oxide	40-60%			
Dicyandiamide	1-5%	461-58-5	_	>10,000 mg/kg rat
Dimethylurea Complex	1-5%	101-42-8	10 mg/m <sup>3</sup>	N/A
Nature of Hazard:	Irritant		-	

All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

#### SECTION 3: PHYSICAL PROPERTY INFORMATION

**Boiling Point:** No Data

Vapor Density (Air=1): >1

Solubility In Water:Negligible% Volatile (By Weight):NegligibleSpecific Gravity (Water = 1):1.16Vapor Pressure (mm Hg):No DataMelting Or Freezing Point:No Data

Evaporation Rate (Butyl Acetate = 1): <1

Appearance Odor: Viscous Grey Liquid

#### **SECTION 4: FIRE AND EXPLOSION HAZARD DATA**

Flash Point: >295°F
Auto Ignition Temp: No Data
Lower Explosion Limit (%): No Data
Upper Explosion Limit(%): No Data
Extinguishing Media: Foam, CO2, Dry
Chemical: Value Spray

**SECTION 5: HEALTH HAZARD DATA** 

#### **Effects Of Overexposure:**

Inhalation: Mist or vapor can irritate the nose and throat.

**Eve Contact:** Substantially irritating to eyes.

Skin Contact: Substance is moderately irritating and can cause superficial burns after

Prolonged Contact. Not absorbed in toxic amounts.

*Ingestion:* Harmful if swallowed.

**Delayed Effects:** Prolonged or repeated exposure can cause allergic reaction.

#### **SECTION 6: EMERGENCY AND FIRST AID PROCEDURES**

Inhalation: Move Subject To Fresh Air. Give Artificial Respiration If Breathing Has

Stopped.

**Eye And Skin Contact:** Flush Eyes With A Large Amount Of Water For At Least 15 Minutes. Get Prompt Medical Attention. Wash Skin Thoroughly With Soap And Water.

Remove And Wash Clothing Before Reuse.

Ingestion: If Swallowed Dilute By Giving 2 Glasses Of Water To Drink. See A

Physician. Never Give Anything By Mouth To An Unconscious Person.

#### SECTION 7: REACTIVITY INFORMATION

**Stability:** 3 Months at Temp Below 70°F

Hazardous Polymerization: Will Not Occur

#### **SECTION 8: SPILL OR LEAK PROCEDURES**

Dike and absorb spill on inert material (sand, earth, etc.). Transfer diking material to containers for disposal. Wear protective clothing. Use breathing apparatus (MSHA/NIOSH-approved, pressure-demand, self-contained) or air mask for large spills in confined area. Wash clothing before reuse. Destroy clothing that cannot be decontaminated (i.e. Shoes).

**Waste Disposal Methods:** Incinerate liquid in approved equipment. Landfill or incinerate contaminated diking material in accordance with local, state and federal regulations.

#### **SECTION 9: SPECIAL PROTECTION INFORMATION**

**Ventilation Type:** Normal room ventilation.

**Respiratory Protection:** None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH-approved or equivalent) suitable for concentrations and types of air contaminants encountered.

**Protective Gloves:** Impervious.

Eye Protection: Chemical splash goggles(ANSI Z-871 or approved equivalent).

Other Protective Equipment: Eyewash facility.

#### SECTION 10: SPECIAL PRECAUTIONS

Store away from excessive heat (e.g., steam-pipes, radiators, from sources of ignition, and from reactive materials). Do not store near food or feed.

Corrosive Material: Avoid all eye and skin contact.

*Misc Info:* The use of this and auxiliary materials should be confined to designated work areas. Emptied containers may still contain hazardous residues.

**Note To Physician:** Allergic dermatitis or respiratory response in susceptible individuals may be delayed even weeks or months after frequent and/or prolonged contact. Acute effects can include mucosa damage, severe laryngeal edema, and shock associated with corrosive agents. Possible mucosa damage may contraindicate the use of gastric layage.

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DATE PREPARED: 11/01/85 DATE REVISED: 02/23/06

HIMS RATING Health = 2 Fire = 0 Reactivity = 0 HAZARD RATING: 0 = Insignificant 1 = Non-Toxic, Slight 2 = Moderate 3 = High 4 = Extreme

### MATERIAL SAFETY DATA SHEET COTRONICS EPOXY RESINS

#### DURALCO 4525 DURALCO 4535 DURALCO S5H13 DURALCO 4537 DURALCO 4538 DURALCO 4540

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

SECTION 1: PRODUCT IDENTIFICATION

Chemical Name And Synonyms: N/A Mixture

Chemical Formula: N/A

Chemical Family: Proprietary Modified Epoxy Resin.\*

SECTION 2: COMPOSITION INFORMATION

Material: Proprietary Modified Epoxy Resin

All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

SECTION 3: PHYSICAL PROPERTY INFORMATION

Boiling Point: > 400°F Vapor Density (Air=1): > 1

Solubility In Water:

% Volatile (By Weight):

Specific Gravity (Water=1):

Vapor Pressure (mm Hg):

Melting Or Freezing Point:

Negligible

1.7 - 2.1

N/A

\*\*No. 1.7 - 2.1

\*\*

Melting Or Freezing Point: < 40° Evaporation Rate (Butyl Acetate= 1): < 1

Appearance/Odor: Amber Transparent To Viscous Black Liquids/Slight Odor

SECTION 4: FIRE AND EXPLOSION HAZARD DATA

Flash Point: > 295°F

Auto Ignition Temp: N/A
Lower Explosion Limit (%): N/A
Upper Explosion Limit (%): N/A

Extinguishing Media: Foam, C02, Dry Chemical: Water Spray

SECTION 5: HEALTH HAZARD DATA

Effects Of Overexposure:

*Inhalation:* Mist or vapor can irritate the nose and throat.

*Eye Contact:* Substantially irritating to eyes.

Skin Contact: Substance is moderately irritating and can cause superficial burns

after prolonged contact. Not absorbed in toxic amounts

*Ingestion:* Possibly harmful if swallowed.

Delayed Effects: Prolonged or repeated exposure can cause allergic reaction.

#### **SECTION 6: EMERGENCY AND FIRST AID PROCEDURES**

**Inhalation:** Move subject to fresh air. Give artificial respiration if breathing has stopped. **Eye And Skin Contact:** Flush eyes with a large amount of water for at least 15 minutes. Get prompt medical attention. Wash skin thoroughly with soap and water. Remove and wash clothing before reuse.

*Ingestion:* If swallowed dilute by giving 2 glasses of water to drink. See a physician. Never give anything by mouth to an unconscious person.

#### **SECTION 7: REACTIVITY INFORMATION**

Stability: Stable
Hazardous Polymerization: Will Not Occur

#### **SECTION 8: SPILL OR LEAK PROCEDURES**

Dike and absorb spill on inert material (sand, earth, etc.). Transfer diking material to containers for disposal. Wear protective clothing. Use breathing apparatus (MSHA/NIOSH approved, pressure-demand, self-contained) or air mask for large spills in confined area. Wash clothing before reuse. Destroy clothing that cannot be decontaminated (i.e. Shoes).

**Waste Disposal Methods:** Landfill or incinerate contaminated in accordance with local, state and federal regulations. Dispose of material in approved equipment.

#### **SECTION 9: SPECIAL PROTECTION INFORMATION**

Ventilation Type: Normal room ventilation.

**Respiratory Protection:** None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH approved or equivalent) suitable for concentrations and types of air contaminants encountered.

Protective Gloves: Impervious.

Eye Protection: Chemical splash goggles (ANSI Z-871 or approved equivalent).

Other Protective Equipment: Eyewash facility.

#### **SECTION 10: SPECIAL PRECAUTIONS**

Store away from excessive heat (e.g., steam-pipes, radiators, from sources of ignition, and from reactive materials). Do not store near food or feed. Avoid all eye and skin contact.

**Note To Physician:** Allergic dermatitis or respiratory response in susceptible individuals may be delayed even weeks or months after frequent and/or prolonged contact. Acute effects can include mucosa damage, severe laryngeal edema, and shock associated with corrosive agents. Possible mucosa damage may contraindicate the use of gastric lavage. (This product is not approved by FDA for internal use).

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#### **COTRONICS EPOXY RESINS**

#### **DURALCO 4525HT DURALCO 4540HT**

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

**SECTION 1: PRODUCT IDENTIFICATION** 

Chemical Name and Synonyms: N/A Mixture

Chemical Formula: N/A

Chemical Family: Proprietary Modified Epoxy Resin.\*

**SECTION 2: COMPOSITION INFORMATION** 

**Material:** Proprietary Modified Epoxy Resin

All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

SECTION 3: PHYSICAL PROPERTY INFORMATION

**Boiling Point:** > 400°F

Vapor Density (Air=1): >1

Solubility In Water:

% Volatile (By Weight):

Specific Gravity (Water=1):

Vapor Pressure (mm Hg):

Melting Or Freezing Point:

Evaporation Rate (Butyl Acetate=1):

Negligible

Negligible

1.7 - 2.1

N/A

40°F

Appearance/Odor: Viscous Black or Grey Liquids/Slight Odor

SECTION 4: FIRE AND EXPLOSION HAZARD DATA

Flash Point: > 295°F

Auto Ignition Temp: N/A
Lower Explosion Limit (%): N/A
Upper Explosion Limit (%): N/A

Extinguishing Media: Foam, C02, Dry Chemical: Water Spray

**SECTION 5: HEALTH HAZARD DATA** 

**Effects Of Overexposure:** 

Inhalation: Mist or vapor can irritate the nose and throat.

Eye Contact: Substantially irritating to eyes.

Skin Contact: Substance is moderately irritating and can cause superficial burns after

prolonged contact. Not absorbed in toxic amounts

Ingestion: Harmful if swallowed.

**Delayed Effects:** Prolonged or repeated exposure can cause allergic reaction.

#### SECTION 6: EMERGENCY AND FIRST AID PROCEDURES

**Inhalation:** Move subject to fresh air. Give artificial respiration if breathing has stopped. **Eye And Skin Contact:** Flush eyes with a large amount of water for at least 15 minutes. Get prompt medical attention. Wash skin thoroughly with soap and water. Remove and wash clothing before reuse.

*Ingestion:* If swallowed dilute by giving 2 glasses of water to drink. See a physician. Never give anything by mouth to an unconscious person.

#### SECTION 7: REACTIVITY INFORMATION

Stability: Stable
Hazardous Polymerization: Will Not Occur

#### **SECTION 8: SPILL OR LEAK PROCEDURES**

Dike and absorb spill on inert material (sand, earth, etc.). Transfer diking material to containers for disposal. Wear protective clothing. Use breathing apparatus (MSHA/NIOSH approved, pressure-demand, self-contained) or air mask for large spills in confined area. Wash clothing before reuse. Destroy clothing that cannot be decontaminated (i.e. Shoes).

**Waste Disposal Methods:** Landfill or incinerate contaminated in accordance with local, state and federal regulations. Dispose of material in approved equipment.

#### **SECTION 9: SPECIAL PROTECTION INFORMATION**

Ventilation Type: Normal room ventilation.

**Respiratory Protection:** None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH approved or equivalent) suitable for concentrations and types of air contaminants encountered.

Protective Gloves: Impervious.

Eve Protection: Chemical splash goggles (ANSI Z-871 or approved equivalent).

Other Protective Equipment: Eyewash facility.

#### **SECTION 10: SPECIAL PRECAUTIONS**

Store away from excessive heat (e.g., steam-pipes, radiators, from sources of ignition, and from reactive materials). Do not store near food or feed. Avoid all eye and skin contact.

**Note To Physician:** Allergic dermatitis or respiratory response in susceptible individuals may be delayed even weeks or months after frequent and/or prolonged contact. Acute effects can include mucosa damage, severe laryngeal edema, and shock associated with corrosive agents. Possible mucosa damage may contraindicate the use of gastric lavage. (This product is not approved by FDA for internal use).

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### COTRONICS EPOXY HARDENERS DURALCO 4525HT DURALCO 4540HT

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

#### **SECTION ONE**

Chemical Name And Synonyms: N/A Mixture\*

Formula: N/A

Chemical Family: Amine Complex

#### **SECTION 2: PHYSICAL PROPERTY INFORMATION**

Boiling Point: N/A Vapor Density (Air=1): >1

Solubility In Water:Negligible% Volatile (By Weight):NegligibleMelting Or Freezing Point:N/AVapor Pressure (mm Hg):N/ASpecific Gravity (Water=1):0.93 - 1.30

Evaporation Rate (Butyl Acetate=1): <1

Appearance/Odor: Transparent amber to opaque brown

liquid/Amine odor

All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

#### SECTION 3: FIRE AND EXPLOSION HAZARD DATA

Flash Point: >200°F
Auto Ignition Temp: N/A
Lower Explosion Limit (%): N/A
Upper Explosion Limit (%): N/A

Extinguishing Media: Foam, C02, Dry Chemical: Water Spray

#### **SECTION 4: HEALTH HAZARD DATA**

**Effects Of Overexposure:** 

*Inhalation:* Mist/Vapor can irritate the nose and throat.

Eye Contact: Substantially irritating to eyes.

Skin Contact: Substance is moderately irritating and can cause superficial burns after

prolonged contact.

Ingestion: Harmful if swallowed.

**Delayed Effects:** Prolonged or repeated exposure can cause allergic reaction.

#### DATE PREPARED: 11/01/85 DATE REVISED: 02/23/06

#### **SECTION 5: EMERGENCY AND FIRST AID PROCEDURES**

*Inhalation:* Move subject to fresh air. Give artificial respiration if breathing has stopped. *Eye And Skin Contact:* Flush eyes with a large amount of water for at least 15 minutes. Get prompt medical attention. Wash skin thoroughly with soap and water. Remove and wash clothing before reuse.

*Ingestion:* If swallowed dilute by giving 2 glasses of water to drink. See a physician. Never give anything by mouth to an unconscious person.

#### **SECTION 6: REACTIVITY INFORMATION**

Stability: Stable

Hazardous Polymerization: Will not occur

#### **SECTION 7: SPILL OR LEAK PROCEDURES**

Dike and absorb spill on inert material (sand, earth, etc.). Transfer diking material to containers for disposal. Wear protective clothing. Use breathing apparatus (MSHA/NIOSH approved, pressure-demand, self-contained) or air mask for large spills in confined area. Wash clothing before reuse. Destroy clothing that cannot be decontaminated (i.e. Shoes).

**Waste Disposal Methods:** Landfill or incinerate contaminated in accordance with local, state and federal regulations. Dispose of material in approved equipment.

#### SECTION 8: SPECIAL PROTECTION INFORMATION

Ventilation Type: Normal room ventilation.

**Respiratory Protection:** None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH approved or equivalent) suitable for concentrations and types

of air contaminants encountered. **Protective Gloves:** Impervious.

Eye Protection: Chemical splash goggles (ANSI Z-871 or approved equivalent).

Other Protective Equipment: Eyewash facility.

#### **SECTION 9: SPECIAL PRECAUTIONS**

Store away from excessive heat (e.g., steam-pipes, radiators, from sources of ignition, and from reactive materials). Do not store near food or feed. Avoid all eye and skin contact.

*Misc Info:* The use of this and auxiliary materials should be confined to designated work areas. Emptied containers may still contain hazardous residues.

**Note To Physician:** Allergic dermatitis or respiratory response in susceptible individuals may be delayed even weeks or months after frequent and/or prolonged contact. Acute effects can include mucosa damage, severe laryngeal edema, and shock associated with corrosive agents. Possible mucosa damage may contraindicate the use of gastric lavage.

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HIMS RATING Health = 2 Fire = 1 Reactivity = 0 HAZARD RATING: 0 = Insignificant 1 = Non-Toxic, Slight 2 = Moderate 3 = High 4 = Extreme

## MATERIAL SAFETY DATA SHEET COTRONICS EPOXY HARDENERS

#### DURALCO 4525 DURALCO 4535 DURALCO S5H13 DURALCO 4537 DURALCO 4538 DURALCO 4540

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

#### **SECTION ONE**

Chemical Name And Synonyms: N/A Mixture\*

Formula: N/A

Chemical Family: Amine Complex

#### **SECTION 2: PHYSICAL PROPERTY INFORMATION**

Boiling Point: N/A Vapor Density (Air=1): >1

Solubility In Water:

% Volatile (By Weight):

Melting Or Freezing Point:

Negligible

N/A

Vapor Pressure (mm Hg): N/A Specific Gravity (Water=1): 0.93 - 1.30

Evaporation Rate (Butyl Acetate=1): <1

Appearance/Odor: Transparent amber to opaque brown

liquid/Amine odor

All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

#### **SECTION 3: FIRE AND EXPLOSION HAZARD DATA**

Flash Point: >200°F
Auto Ignition Temp: N/A
Lower Explosion Limit (%): N/A
Upper Explosion Limit (%): N/A

Extinguishing Media: Foam, C02, Dry Chemical: Water Spray

#### **SECTION 4: HEALTH HAZARD DATA**

Effects Of Overexposure:

*Inhalation:* Mist/Vapor can irritate the nose and throat.

*Eye Contact:* Substantially irritating to eyes.

Skin Contact: Substance is moderately irritating and can cause superficial burns after

prolonged contact.

*Ingestion:* Possibly harmful if swallowed.

Delayed Effects: Prolonged or repeated exposure can cause allergic reaction.

DATE PREPARED: 11/01/85 DATE REVISED: 02/23/06

#### SECTION 5: EMERGENCY AND FIRST AID PROCEDURES

Inhalation: Move subject to fresh air. Give artificial respiration if breathing has stopped

Eye And Skin Contact: Flush eyes with a large amount of water for at least 15 minutes. Get prompt medical attention. Wash skin thoroughly with soap and water. Remove and wash clothing before reuse.

*Ingestion:* If swallowed dilute by giving 2 glasses of water to drink. See a physician. Never give anything by mouth to an unconscious person.

#### **SECTION 6: REACTIVITY INFORMATION**

Stability: Stable

Hazardous Polymerization: Will not occur

#### SECTION 7: SPILL OR LEAK PROCEDURES

Dike and absorb spill on inert material (sand, earth, etc.). Transfer diking material to containers for disposal. Wear protective clothing. Use breathing apparatus (MSHA/NIOSH approved, pressure-demand, self-contained) or air mask for large spills in confined area. Wash clothing before reuse. Destroy clothing that cannot be decontaminated (i.e. Shoes).

Waste Disposal Methods: Landfill or incinerate contaminated in accordance with local, state and federal regulations. Dispose of material in approved equipment.

#### SECTION 8: SPECIAL PROTECTION INFORMATION

Ventilation Type: Normal room ventilation.

Respiratory Protection: None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH approved or equivalent) suitable for concentrations and types of air contaminants encountered.

Protective Gloves: Impervious.

Eye Protection: Chemical splash goggles (ANSI Z-871 or approved equivalent).

Other Protective Equipment: Eyewash facility.

#### **SECTION 9: SPECIAL PRECAUTIONS**

Store away from excessive heat (e.g., steam-pipes, radiators, from sources of ignition, and from reactive materials). Do not store near food or feed. Avoid all eye and skin contact.

Misc Info: The use of this and auxiliary materials should be confined to designated work areas. Emptied containers may still contain hazardous residues.

Note To Physician: Allergic dermatitis or respiratory response in susceptible individuals may be delayed even weeks or months after frequent and/or prolonged contact. Acute effects can include mucosa damage, severe laryngeal edema, and shock associated with corrosive agents. Possible mucosa damage may contraindicate

the use of gastric lavage.

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HIMS RATING Health = 2 Fire = 1 Reactivity = 0 HAZARD RATING: 0 = Insignificant 1 = Non-Toxic, Slight 2 = Moderate 3 = High 4 = Extreme

### MATERIAL SAFETY DATA SHEET COTRONICS EPOXY RESINS

#### **DURALCO 4525N Resin**

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

**SECTION 1: PRODUCT IDENTIFICATION** 

Chemical Name And Synonyms: N/A Mixture

Chemical Formula: N/A

Chemical Family: Proprietary Modified Epoxy Resin.\*

**SECTION 2: COMPOSITION INFORMATION** 

Material: Proprietary Modified Epoxy Resin

All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

**SECTION 3: PHYSICAL PROPERTY INFORMATION** 

**Boiling Point:** > 400°F

Vapor Density (Air=1): >1

Solubility In Water:

% Volatile (By Weight):

Specific Gravity (Water=1):

Negligible

Negligible

1.47

Vapor Pressure (mm Hg):

Melting Or Freezing Point: < 40°F

Evaporation Rate (Butyl Acetate=1): <1

Appearance/Odor: Amber Transparent To Viscous Black Liquids/Slight Odor

SECTION 4: FIRE AND EXPLOSION HAZARD DATA

Flash Point: > 295°F Auto Ignition Temp: N/A

Lower Explosion Limit (%): N/A
Upper Explosion Limit (%): N/A

Extinguishing Media: Foam, C02, Dry Chemical: Water Spray

**SECTION 5: HEALTH HAZARD DATA** 

**Effects Of Overexposure:** 

Inhalation: Mist or vapor can irritate the nose and throat.

Eye Contact: Substantially irritating to eyes.

Skin Contact: Substance is moderately irritating and can cause superficial burns after

prolonged contact. Not absorbed in toxic amounts

Ingestion: Harmful if swallowed.

**Delayed Effects:** Prolonged or repeated exposure can cause allergic reaction.

#### **SECTION 6: EMERGENCY AND FIRST AID PROCEDURES**

**Inhalation:** Move subject to fresh air. Give artificial respiration if breathing has stopped. **Eye And Skin Contact:** Flush eyes with a large amount of water for at least 15 minutes. Get prompt medical attention. Wash skin thoroughly with soap and water. Remove and wash clothing before reuse.

*Ingestion:* If swallowed dilute by giving 2 glasses of water to drink. See a physician. Never give anything by mouth to an unconscious person.

#### SECTION 7: REACTIVITY INFORMATION

**Stability:** Stable **Hazardous Polymerization:** Will Not Occur

#### **SECTION 8: SPILL OR LEAK PROCEDURES**

Dike and absorb spill on inert material (sand, earth, etc.). Transfer diking material to containers for disposal. Wear protective clothing. Use breathing apparatus (MSHA/NIOSH approved, pressure-demand, self-contained) or air mask for large spills in confined area. Wash clothing before reuse. Destroy clothing that cannot be decontaminated (i.e. Shoes).

**Waste Disposal Methods:** Landfill or incinerate contaminated in accordance with local, state and federal regulations. Dispose of material in approved equipment.

#### **SECTION 9: SPECIAL PROTECTION INFORMATION**

Ventilation Type: Normal room ventilation.

**Respiratory Protection:** None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH approved or equivalent) suitable for concentrations and types of air contaminants encountered.

Protective Gloves: Impervious.

Eye Protection: Chemical splash goggles (ANSI Z-871 or approved equivalent).

Other Protective Equipment: Eyewash facility.

#### SECTION 10: SPECIAL PRECAUTIONS

Store away from excessive heat (e.g., steam-pipes, radiators, from sources of ignition, and from reactive materials). Do not store near food or feed. Avoid all eye and skin contact.

**Note To Physician:** Allergic dermatitis or respiratory response in susceptible individuals may be delayed even weeks or months after frequent and/or prolonged contact. Acute effects can include mucosa damage, severe laryngeal edema, and shock associated with corrosive agents. Possible mucosa damage may contraindicate the use of gastric lavage. (This product is not approved by FDA for internal use).

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## MATERIAL SAFETY DATA SHEET COTRONICS EPOXY HARDENERS

#### **DURALCO 4525N Hardener**

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

#### **SECTION ONE**

Chemical Name And Synonyms: N/A Mixture\*

Formula: N/A

Chemical Family: Amine Complex

#### **SECTION 2: PHYSICAL PROPERTY INFORMATION**

Boiling Point: N/A Vapor Density (Air=1): >1

Solubility In Water: Negligible
% Volatile (By Weight): Negligible
Melting Or Freezing Point: N/A
Vapor Pressure (mm Hg): N/A

Vapor Pressure (mm Hg): N/A Specific Gravity (Water=1): 1.97 Evaporation Rate (Butyl Acetate=1): <1

**Appearance/Odor:** Transparent amber to opaque brown

liquid/Amine odor

All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

#### **SECTION 3: FIRE AND EXPLOSION HAZARD DATA**

Flash Point: >200°F
Auto Ignition Temp: N/A
Lower Explosion Limit (%): N/A
Upper Explosion Limit (%): N/A

Extinguishing Media: Foam, C02, Dry Chemical: Water Spray

#### **SECTION 4: HEALTH HAZARD DATA**

**Effects Of Overexposure:** 

*Inhalation:* Mist/Vapor can irritate the nose and throat.

Eye Contact: Substantially irritating to eyes.

Skin Contact: Substance is moderately irritating and can cause superficial burns after

prolonged contact.

Ingestion: Harmful if swallowed.

**Delayed Effects:** Prolonged or repeated exposure can cause allergic reaction.

#### DATE PREPARED: 11/01/85 DATE REVISED: 02/23/06

#### **SECTION 5: EMERGENCY AND FIRST AID PROCEDURES**

**Inhalation:** Move subject to fresh air. Give artificial respiration if breathing has stopped. **Eye And Skin Contact:** Flush eyes with a large amount of water for at least 15 minutes. Get prompt medical attention. Wash skin thoroughly with soap and water. Remove and wash clothing before reuse.

*Ingestion:* If swallowed dilute by giving 2 glasses of water to drink. See a physician. Never give anything by mouth to an unconscious person.

#### **SECTION 6: REACTIVITY INFORMATION**

Stability: Stable

Hazardous Polymerization: Will not occur

#### SECTION 7: SPILL OR LEAK PROCEDURES

Dike and absorb spill on inert material (sand, earth, etc.). Transfer diking material to containers for disposal. Wear protective clothing. Use breathing apparatus (MSHA/NIOSH approved, pressure-demand, self-contained) or air mask for large spills in confined area. Wash clothing before reuse. Destroy clothing that cannot be decontaminated (i.e. Shoes).

**Waste Disposal Methods:** Landfill or incinerate contaminated in accordance with local, state and federal regulations. Dispose of material in approved equipment.

#### **SECTION 8: SPECIAL PROTECTION INFORMATION**

Ventilation Type: Normal room ventilation.

**Respiratory Protection:** None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH approved or equivalent) suitable for concentrations and types of air contaminants encountered.

Protective Gloves: Impervious.

Eye Protection: Chemical splash goggles (ANSI Z-871 or approved equivalent).

Other Protective Equipment: Eyewash facility.

#### **SECTION 9: SPECIAL PRECAUTIONS**

Store away from excessive heat (e.g., steam-pipes, radiators, from sources of ignition, and from reactive materials). Do not store near food or feed. Avoid all eye and skin contact.

*Misc Info:* The use of this and auxiliary materials should be confined to designated work areas. Emptied containers may still contain hazardous residues.

**Note To Physician:** Allergic dermatitis or respiratory response in susceptible individuals may be delayed even weeks or months after frequent and/or prolonged contact. Acute effects can include mucosa damage, severe laryngeal edema, and shock associated with corrosive agents. Possible mucosa damage may contraindicate the use of gastric lavage.

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HIMS RATING Health = 2 Fire = 1 Reactivity = 0 HAZARD RATING: 0 = Insignificant 1 = Non-Toxic, Slight 2 = Moderate 3 = High 4 = Extreme

### MATERIAL SAFETY DATA SHEET COTRONICS EPOXY RESINS

#### **DURALCO 4538 HT**

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

**SECTION 1: PRODUCT IDENTIFICATION** 

Chemical Name And Synonyms: N/A Mixture

Chemical Formula: N/A

Chemical Family: Proprietary Modified Epoxy Resin.\*

**SECTION 2: COMPOSITION INFORMATION** 

**Material:** Proprietary Modified Epoxy Resin

All materials contained within are listed on the TSCA Inventory list

This product is compliant with the RoHS Directive..

SECTION 3: PHYSICAL PROPERTY INFORMATION

**Boiling Point:** > 400°F

Vapor Density (Air=1): >1

Solubility In Water:

% Volatile (By Weight):

Specific Gravity (Water=1):

Vapor Pressure (mm Hg):

Melting Or Freezing Point:

Evaporation Rate (Butyl Acetate=1):

Negligible

Negligible

1.0 - 1.3

N/A

40°F

Appearance/Odor: Amber Transparent To Viscous Black Liquids/Slight Odor

SECTION 4: FIRE AND EXPLOSION HAZARD DATA

Flash Point: > 295°F
Auto Ignition Temp: N/A
Lower Explosion Limit (%): N/A

Upper Explosion Limit (%): N/A Extinguishing Media: N/A Foam, C02, Dry

Chemical: Water Spray

**SECTION 5: HEALTH HAZARD DATA** 

**Effects of Overexposure:** 

**Inhalation:** Mist or vapor can irritate the nose and throat.

Eve Contact: Substantially irritating to eyes.

Skin Contact: Substance is moderately irritating and can cause superficial burns after

prolonged contact. Not absorbed in toxic amounts

Ingestion: Harmful if swallowed.

**Delayed Effects:** Prolonged or repeated exposure can cause allergic reaction.

#### SECTION 6: EMERGENCY AND FIRST AID PROCEDURES

**Inhalation:** Move subject to fresh air. Give artificial respiration if breathing has stopped. **Eye And Skin Contact:** Flush eyes with a large amount of water for at least 15 minutes. Get prompt medical attention. Wash skin thoroughly with soap and water. Remove and wash clothing before reuse.

Ingestion: If swallowed dilute by giving 2 glasses of water to drink. See a physician.

Never give anything by mouth to an unconscious person.

#### **SECTION 7: REACTIVITY INFORMATION**

Stability: Stable

Hazardous Polymerization: Will Not Occur

#### **SECTION 8: SPILL OR LEAK PROCEDURES**

Dike and absorb spill on inert material (sand, earth, etc.). Transfer diking material to containers for disposal. Wear protective clothing. Use breathing apparatus (MSHA/NIOSH approved, pressure-demand, self-contained) or air mask for large spills in confined area. Wash clothing before reuse. Destroy clothing that cannot be decontaminated (i.e. Shoes).

**Waste Disposal Methods:** Landfill or incinerate contaminated in accordance with local, state and federal regulations. Dispose of material in approved equipment.

#### **SECTION 9: SPECIAL PROTECTION INFORMATION**

**Ventilation Type:** Normal room ventilation.

**Respiratory Protection:** None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH approved or equivalent) suitable for concentrations and types of air contaminants encountered.

**Protective Gloves:** Impervious.

Eye Protection: Chemical splash goggles (ANSI Z-871 or approved equivalent).

Other Protective Equipment: Eyewash facility.

#### SECTION 10: SPECIAL PRECAUTIONS

Store away from excessive heat (e.g., steam-pipes, radiators, from sources of ignition, and from reactive materials). Do not store near food or feed. Avoid all eye and skin contact.

**Note To Physician:** Allergic dermatitis or respiratory response in susceptible individuals may be delayed even weeks or months after frequent and/or prolonged contact. Acute effects can include mucosa damage, severe laryngeal edema, and shock associated with corrosive agents. Possible mucosa damage may contraindicate the use of gastric lavage. (This product is not approved by FDA for internal use).

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Note: This is a peliminary data sheet and will be revised as additional data is obtained

DATE PREPARED: 11/01/85 DATE REVISED: 02/23/06

HIMS RATING Health = 2 Fire = 0 Reactivity = 0 HAZARD RATING: 0 = Insignificant 1 = Non-Toxic, Slight 2 = Moderate 3 = High 4 = Extreme

#### MATERIAL SAFETY DATA SHEET **COTRONICS EPOXY HARDENERS**

#### DURALCO 4538 HT

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

#### **SECTION ONE**

Chemical Name And Synonyms: N/A Mixture\*

Formula: N/A

**Chemical Family:** Amine Complex

#### **SECTION 2: PHYSICAL PROPERTY INFORMATION**

**Boiling Point:** N/A Vapor Density (Air=1): >1

Solubility In Water: Negligible % Volatile (By Weight): Negligible

Melting Or Freezing Point: N/A Vapor Pressure (mm Hg): N/A Specific Gravity (Water=1): 0.9 - 1.1

Evaporation Rate (Butyl Acetate=1): <1

Appearance/Odor: Transparent amber to opaque brown

liquid/Amine odor

All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

#### **SECTION 3: FIRE AND EXPLOSION HAZARD DATA**

Flash Point: >200°F Auto Ignition Temp: N/A Lower Explosion Limit (%): N/A

Upper Explosion Limit (%): N/A Extinguishing Media:

Foam, C02, Dry Chemical: Water Spray

#### **SECTION 4: HEALTH HAZARD DATA**

#### **Effects Of Overexposure:**

*Inhalation:* Mist/Vapor can irritate the nose and throat.

Eve Contact: Substantially irritating to eyes.

Skin Contact: Substance is moderately irritating and can cause superficial burns after

prolonged contact.

Ingestion: Harmful if swallowed.

**Delayed Effects:** Prolonged or repeated exposure can cause allergic reaction.

#### DATE PREPARED: 11/01/85 **DATE REVISED: 02/23/06**

#### **SECTION 5: EMERGENCY AND FIRST AID PROCEDURES**

Inhalation: Move subject to fresh air. Give artificial respiration if breathing has stopped. Eye And Skin Contact: Flush eyes with a large amount of water for at least 15 minutes. Get prompt medical attention. Wash skin thoroughly with soap and water. Remove and wash clothing before reuse.

Ingestion: If swallowed dilute by giving 2 glasses of water to drink. See a physician. Never give anything by mouth to an unconscious person.

#### SECTION 6: REACTIVITY INFORMATION

Stability: Stable

Hazardous Polymerization: Will not occur

#### **SECTION 7: SPILL OR LEAK PROCEDURES**

Dike and absorb spill on inert material (sand, earth, etc.). Transfer diking material to containers for disposal. Wear protective clothing. Use breathing apparatus (MSHA/NIOSH approved, pressure-demand, self-contained) or air mask for large spills in confined area. Wash clothing before reuse. Destroy clothing that cannot be decontaminated (i.e. Shoes).

Waste Disposal Methods: Landfill or incinerate contaminated in accordance with local, state and federal regulations. Dispose of material in approved equipment.

#### **SECTION 8: SPECIAL PROTECTION INFORMATION**

**Ventilation Type:** Normal room ventilation.

Respiratory Protection: None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH approved or equivalent) suitable for concentrations and types of air contaminants encountered.

Protective Gloves: Impervious.

Eye Protection: Chemical splash goggles (ANSI Z-871 or approved equivalent).

Other Protective Equipment: Eyewash facility.

#### **SECTION 9: SPECIAL PRECAUTIONS**

Store away from excessive heat (e.g., steam-pipes, radiators, from sources of ignition, and from reactive materials). Do not store near food or feed. Avoid all eye and skin contact.

Misc Info: The use of this and auxiliary materials should be confined to designated work areas. Emptied containers may still contain hazardous residues.

Note To Physician: Allergic dermatitis or respiratory response in susceptible individuals may be delayed even weeks or months after frequent and/or prolonged contact. Acute effects can include mucosa damage, severe laryngeal edema, and shock associated with corrosive agents. Possible mucosa damage may contraindicate the use of gastric lavage.

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Note: This is a peliminary data sheet and will be revised as additional data is obtained

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HIMS RATING Health = 2 Fire = 1 Reactivity = 0 HAZARD RATING: 0 = Insignificant 1 = Non-Toxic, Slight 2 = Moderate 3 = High 4 = Extreme

**DURALCO 4700 - DURALCO 4700HT DURALCO 4703 - DURALCO 4703HT** 

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

**SECTION 1: PRODUCT IDENTIFICATION** 

**Chemical Name:** 

**Chemical Family:** Proprietary Modified Epoxy Resin

Chemical Formula: N/A

\*Please Note All Materials Contained Are Listed On The EPA TSCA Inventory List.

This product is compliant with the RoHS Directive.

**SECTION 2: COMPOSITION INFORMATION** 

*Material:* Proprietary Modified Epoxy Resin

Nature of Hazard: Irritant

**SECTION 3: PHYSICAL PROPERTY INFORMATION** 

Melting or Freezing Point: <40°F

**Boiling Point:** >400°F Vapor Pressure (mm Hg): N/A Vapor Density (Air=1): >1.

Solubility In Water: Negligible. % Volatile (By Weight): Negligible. Specific Gravity (Water 1): 1.16.

Evaporation Rate (Butyl Acetate = 1): <1.

Appearance Odor: Viscous Black Liquid

**SECTION 4: FIRE AND EXPLOSION HAZARD DATA** 

Flash Point: >295 °F **Auto Ignition Temp:** N/A

Lower Explosion Limit (%): N/A **Upper Explosion Limit(%)**: N/A

**Extinguishing Media:** Foam, C02, Dry Chemical: Water Spray

**SECTION 5: HEALTH HAZARD DATA** 

**Effects Of Overexposure:** 

*Inhalation:* Mist or vapor can irritate the nose and throat.

Eve Contact: Substantially irritating to eyes.

Skin Contact: Substance is moderately irritating and can cause superficial burns after

prolonged contact. Not absorbed in toxic amounts

Ingestion: Harmful if swallowed.

**Delayed Effects:** Prolonged or repeated exposure can cause allergic reaction.

#### **SECTION 6: EMERGENCY AND FIRST AID PROCEDURES**

**Inhalation:** Move subject to fresh air. Give artificial respiration if breathing has stopped.

Eye And Skin Contact: Flush eyes with a large amount of water for at least 15 minutes. Get prompt medical attention. Wash skin thoroughly with soap and water.

Remove and wash clothing before reuse.

Ingestion: If swallowed dilute by giving 2 glasses of water to drink. See a physician.

Never give anything by mouth to an unconscious person.

#### SECTION 7: REACTIVITY INFORMATION

Stability: Stable

Hazardous Polymerization: Will Not Occur.

#### SECTION 8: SPILL OR LEAK PROCEDURES

Dike and absorb spill on inert material (sand, earth, etc.). Transfer diking material to containers for disposal. Wear protective clothing. Use breathing apparatus (MSHA/NIOSH-approved, pressure-demand, self-contained) or air mask for large spills in confined area. Wash clothing before reuse. Destroy clothing that cannot be decontaminated (i.e. Shoes).

Waste Disposal Methods: Incinerate liquid in approved equipment. Landfill or incinerate contaminated diking material in accordance with local, state and federal regulations.

#### **SECTION 9: SPECIAL PROTECTION INFORMATION**

**Ventilation Type:** Normal room ventilation.

Respiratory Protection: None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH-approved or equivalent) suitable for concentrations and types of air contaminants encountered.

Protective Gloves: Impervious.

**Eye Protection:** Chemical splash goggles(ANSI Z-871 or approved equivalent)

Other Protective Equipment: Eyewash facility.

#### SECTION 10: SPECIAL PRECAUTIONS

Store away from excessive heat (e.g., steam-pipes, radiators, from sources of ignition, and from reactive materials). Do not store near food or feed.

Corrosive Material: Avoid all eye and skin contact...

Misc Info: The use of this and auxiliary materials should be confined to designated

work areas. Emptied containers may still contain hazardous residues.

Note To Physician: Allergic dermatitis or respiratory response in susceptible individuals may be delayed even weeks or months after frequent and/or prolonged contact. Acute effects can include mucosa damage, severe laryngeal edema, and shock associated with corrosive agents. Possible mucosa damage may contraindicate the use of gastric lavage.

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Date Prepared 11/01/85

Date Revised 02/23/06

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DURALCO 4700 - DURALCO 4700HT DURALCO 4703 - DURALCO 4703HT

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

#### **SECTION ONE:**

Chemical Name And Synonyms: N/A Mixture\*

Formula: N/A

**Chemical Family:** Acid Anhydride Complex. All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

#### **SECTION 2: PHYSICAL PROPERTY INFORMATION**

**Boiling Point:** N/A **Vapor Density (Air=1):** >1

Solubility In Water:

% Volatile (By Weight):

Melting Or Freezing Point:

Vapor Pressure (mm Hg):

Specific Gravity (Water=1):

Negligible

Negligible

Negligible

Negligible

N/A

0.93 - 1.30

Evaporation Rate (Butyl Acetate=1): <1

Appearance/Odor: Off white opaque amber liquid/Amine odor

#### **SECTION 3: FIRE AND EXPLOSION HAZARD DATA**

Flash Point: >200°F
Auto Ignition Temp: N/A
Lower Explosion Limit (%): N/A
Upper Explosion Limit (%): N/A

Extinguishing Media: Foam, C02, Dry Water Spray

#### **SECTION 4: HEALTH HAZARD DATA**

#### **Effects Of Overexposure:**

Inhalation: Mist/Vapor can irritate the nose and throat.

Eye Contact: Substantially irritating to eyes.

Skin Contact: Substance is moderately irritating and can cause superficial burns after

prolonged contact.

Ingestion: Harmful if swallowed.

**Delayed Effects:** Prolonged or repeated exposure can cause allergic reaction.

#### DATE PREPARED: 11/01/85 DATE REVISED: 02/23/06

#### **SECTION 5: EMERGENCY AND FIRST AID PROCEDURES**

*Inhalation:* Move subject to fresh air. Give artificial respiration if breathing has stopped. *Eye And Skin Contact:* Flush eyes with a large amount of water for at least 15 minutes. Get prompt medical attention. Wash skin thoroughly with soap and water. Remove and wash clothing before reuse.

*Ingestion:* If swallowed dilute by giving 2 glasses of water to drink. See a physician. Never give anything by mouth to an unconscious person.

#### **SECTION 6: REACTIVITY INFORMATION**

Stability: Stable

Hazardous Polymerization: Will not occur

#### **SECTION 7: SPILL OR LEAK PROCEDURES**

Dike and absorb spill on inert material (sand, earth, etc.). Transfer diking material to containers for disposal. Wear protective clothing. Use breathing apparatus (MSHA/NIOSH approved, pressure-demand, self-contained) or air mask for large spills in confined area. Wash clothing before reuse. Destroy clothing that cannot be decontaminated (i.e. Shoes).

**Waste Disposal Methods:** Incinerate liquid in approved equipment. Landfill or incinerate contaminated diking material in accordance with local, state and federal regulations.

#### **SECTION 8: SPECIAL PROTECTION INFORMATION**

**Ventilation Type:** Normal room ventilation.

**Respiratory Protection:** None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH approved or equivalent) suitable for concentrations and types of air contaminants encountered.

Protective Gloves: Impervious.

Eve Protection: Chemical splash goggles (ANSI Z-871 or approved equivalent).

Other Protective Equipment: Eyewash facility.

#### **SECTION 9: SPECIAL PRECAUTIONS**

Store away from excessive heat (e.g., steam-pipes, radiators, from sources of ignition, and from reactive materials). Do not store near food or feed. Avoid all eye and skin contact.

*Misc Info:* The use of this and auxiliary materials should be confined to designated work areas. Emptied containers may still contain hazardous residues.

**Note To Physician:** Allergic dermatitis or respiratory response in susceptible individuals may be delayed even weeks or months after frequent and/or prolonged contact. Acute effects can include mucosa damage, severe laryngeal edema, and shock associated with corrosive agents. Possible mucosa damage may contraindicate the use of gastric lavage.

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Page 2 of 2

HIMS RATING Health = 2 Fire = 0 Reactivity = 0 HAZARD RATING: 0 = Insignificant 1 = Non-Toxic, Slight 2 = Moderate 3 = High 4 = Extreme

<sup>\*</sup>Note all materials contained are listed on the EPA TSCA Inventory list.

### MATERIAL SAFETY DATA SHEET **COTRONICS EPOXIES**

#### SINGLE COMPONENT **DURALCO 4701**

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

#### **SECTION ONE**

**Chemical Name and Synonyms:** N/A Mixture

**Chemical Formula:** 

Chemical Family: Proprietary Modified Epoxy Resin

#### **SECTION 2: COMPOSITION INFORMATION**

TLV/PEL Ld<sub>50</sub> Oral WT. % CAS Material: Proprietary Modified Epoxy Resin 40-60% Novolac Resin N/A 4000 mg/kg rabbit

Aluminum Oxide 40-60% Proprietary Poyly Anhydride

7-15%

Nature of Hazard: Irritant

All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

#### **SECTION 3: PHYSICAL PROPERTY INFORMATION**

N/A

**Boiling Point:** No Data

Vapor Density (Air=1): >1

Solubility In Water: Nealiaible % Volatile (By Weight): Negligible Specific Gravity (Water = 1): 1.40-1.60 Vapor Pressure (mm Hg): No Data Melting Or Freezing Point: No Data

Evaporation Rate (Butyl Acetate = 1): <1

Appearance Odor: Viscous White Liquid

#### SECTION 4: FIRE AND EXPLOSION HAZARD DATA

Flash Point: >260°F Lower Explosion Limit (%): No Data No Data Upper Explosion Limit (%): No Data Auto Ignition Temp:

Extinguishing Media: Foam, CO<sub>2</sub>, Dry Chemical: Water Spray

Unusual Fire and explosion Hazards: Products of combustion are toxic

#### **SECTION 5: HEALTH HAZARD DATA**

**Effects of Overexposure:** 

Inhalation: Mist or vapor can irritate the nose and throat.

Eye Contact: Substantially irritating to eyes.

Skin Contact: Substance is moderately irritating and can cause superficial burns after

Prolonged Contact. Not absorbed in toxic amounts.

Inaestion: Harmful if swallowed.

**Delayed Effects:** Prolonged or repeated exposure can cause allergic reaction.

#### SECTION 6: EMERGENCY AND FIRST AID PROCEDURES

Inhalation: Move subject to fresh air. give artificial respiration if breathing has stopped. Eye And Skin Contact: Flush eyes with a large amount of water for at least 15 minutes, get prompt medical attention, wash skin thoroughly with soap and water. remove and wash clothing before reuse.

Ingestion: If swallowed dilute by giving 2 glasses of water to drink. see a physician. never give anything by mouth to an unconscious person.

Chemicals are not listed as a carcinogen by national toxicology program, IARC monographs, OSHA etc.

#### SECTION 7: REACTIVITY INFORMATION

Shelf life: 3 Months at Temp Below 70°F

Stability: Stable

Hazardous Polymerization: Will Not Occur Conditions to Avoid Moisture, Heat

#### **SECTION 8: SPILL OR LEAK PROCEDURES**

Dike and absorb spill on inert material (sand, earth, etc.). Transfer diking material to containers for disposal. Wear protective clothing. Use breathing apparatus (MSHA/NIOSH-approved, pressure-demand, self-contained) or air mask for large spills in confined area. Wash clothing before reuse. Destroy clothing that cannot be decontaminated (i.e. Shoes). Floors may become slippery.

Waste Disposal Methods: Incinerate liquid in approved equipment. Landfill or incinerate contaminated diking material in accordance with local, state and federal regulations.

#### SECTION 9: SPECIAL PROTECTION INFORMATION

**Ventilation Type:** Normal room ventilation.

Respiratory Protection: None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH-approved or equivalent) suitable for concentrations and types of air contaminants encountered.

Protective Gloves: Impervious.

**Eye Protection:** Chemical splash goggles(ANSI Z-871 or approved equivalent).

Other Protective Equipment: Eyewash facility.

#### **SECTION 10: SPECIAL PRECAUTIONS**

Store away from excessive heat (e.g., steam-pipes, radiators, from sources of ignition, and from reactive materials). Do not store near food or feed. Keep container tightly closed while not in use.

Corrosive Material: Avoid all eye and skin contact.

Misc Info: The use of this and auxiliary materials should be confined to designated work areas. Emptied containers may still contain hazardous residues.

Note To Physician: Allergic dermatitis or respiratory response in susceptible individuals may be delayed even weeks or months after frequent and/or prolonged contact. Acute effects can include mucosa damage, severe laryngeal edema, and shock associated with corrosive agents. Possible mucosa damage may contraindicate the use of gastric lavage.

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DATE PREPARED: 11/01/85 **DATE REVISED: 02/23/06** 

HIMS RATING Health = 2 Fire = 0 Reactivity = 0 HAZARD RATING: 0 = Insignificant 1 = Non-Toxic, Slight 2 = Moderate 3 = High 4 = Extreme

### MATERIAL SAFETY DATA SHEET FLAME RETARDANT EPOXIES

DURAPOT 4861F, 4864F, 4866F

SECTION ONE: MANUFACTURER

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

SECTION 2: COMPOSITION INFORMATION

OLUTION 2		
Chemical Family	CAS#	%
Part A Resin		
Epoxy Resin	*	<80%
Antimony Oxide	1309644	<20%
Decabromodiphenyloxide	1163195	<22%
Part B Hardener		
Proprietary Organic Amines		98 - 100%
(Contains No MDA)		

<sup>\*</sup> Proprietary Novalac Epoxy Resins

All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

#### **SECTION 3: PHYSICAL PROPERTY INFORMATION**

Appearance/Odor: Resin: Viscous Amber liquid/Sweet odor.

**Hardener:** Amber transparent liquid/Amine odor.

**Melting Or Freezing Point:** N/A **Boiling Point:** N/A Vapor Pressure (mm Hg): N/A Vapor Density (Air=1): >1. Solubility In Water: Nealiaible.

% Volatile (By Weight): Negligible. Specific Gravity (Water=1): Resin: 0.9 - 1.4q/cc

Hardener: 0.9 - 1.3 g/cc

Evaporation Rate (Butyl Acetate=1): <1.

SECTION 4: FIRE AND EXPLOSION HAZARD DATA

Flash Point: >295°F Auto Ignition Temp: N/A Lower Explosion Limit (%): N/A Upper Explosion Limit(%): N/A

Extinguishing Media: Foam, C02, Dry Chemical: Water Spray

**SECTION 5: HEALTH HAZARD DATA** 

**Effects Of Overexposure:** 

Inhalation: Mist or vapor can irritate the nose and throat.

Eve Contact: Substantially irritating to eyes.

Skin Contact: Substance is moderately irritating and can cause superficial burns after

prolonged contact. Not absorbed in toxic amounts.

Ingestion: Harmful if swallowed.

**Delayed Effects:** Prolonged or repeated exposure can cause allergic reaction.

#### **SECTION 6: EMERGENCY AND FIRST AID PROCEDURES**

Inhalation: Move subject to fresh air. Give artificial respiration if breathing has stopped. Eye And Skin Contact: Flush eyes with a large amount of water for at least 15 minutes. Get prompt medical attention. Wash skin thoroughly with soap and water. Remove and wash clothing before reuse.

*Ingestion:* If swallowed dilute by giving 2 glasses of water to drink. See a physician. Never give anything by mouth to an unconscious person.

#### SECTION 7: REACTIVITY INFORMATION

Stability: Stable

Hazardous Polymerization: Will Not Occur.

#### **SECTION 8: SPILL OR LEAK PROCEDURES**

Dike and absorb spill on inert material (sand, earth, etc.). Transfer diking material to containers for disposal. Wear protective clothing. Use breathing apparatus (MSHA/NIOSH-approved, pressure-demand, self-contained) or air mask for large spills in confined area. Wash clothing before reuse. Destroy clothing that cannot be decontaminated (i.e. shoes).

Waste Disposal Methods: Incinerate liquid in approved equipment. Landfill or incinerate contaminated diking material in accordance with local, state and federal regulations.

#### **SECTION 9: SPECIAL PROTECTION INFORMATION**

**Ventilation Type:** Normal room ventilation.

Respiratory Protection: None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH-approved or equivalent ) suitable for concentrations and types of air contaminants encountered.

Protective Gloves: Impervious.

Eye Protection: Chemical splash goggles(ANSI Z-871 or approved equivalent)

Other Protective Equipment: Eyewash facility.

#### **SECTION 10: SPECIAL PRECAUTIONS**

Store away from excessive heat (e.g., steam-pipes, radiators, from sources of ignition, and from reactive materials). Do not store near food or feed.

Corrosive Material: Avoid all eye and skin contact.

Misc Info: The use of this and auxiliary materials should be confined to designated

work areas. Emptied containers may still contain hazardous residues.

Note To Physician: Allergic dermatitis or respiratory response in susceptible individuals may be delayed even weeks or months after frequent and/or prolonged contact. Acute effects can include mucosa damage, severe larvngeal edema, and shock associated with corrosive agents. Possible mucosa damage may contraindicate the use of gastric lavage.

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DATE PREPARED: 11/01/85 **DATE REVISED: 02/23/06** 

HIMS RATING Health = 2 Fire = 0 Reactivity = 0 HAZARD RATING: 0 = Insignificant 1 = Non-Toxic, Slight 2 = Moderate 3 = High 4 = Extreme

# MATERIAL SAFETY DATA SHEET COTRONICS Duralco<sup>™</sup> 6105

**Manufactures Name: COTRONICS CORPORATION** 

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

**SECTION ONE** 

Chemical Name and Synonyms: Alkyl Silicone Resin

Chemical Formula: N/A
Chemical Family: Silicone

**SECTION 2: COMPOSITION INFORMATION** 

Ingredients
Alpha-Isotridecyl-Omega-

Alpha-Isotridecyl-Omega- 9043-30-5 0.5% - 2.5%

Hydroxy-Polyglycolether

Toluene (trace amount) 108-88-3 0.005%-0.5%

CAS No.

316 Stainless Steel (Alloy) Fe 7439-89-6 5- 20% (total alloy content)

Mo 7439-98-7 Ch 7440-47-3 Ni 7440-02-0

This material is non hazardous under OSHA criteria.

There are no carcinogenic ingredients present at or over 0.1% in this material. This material contains between 0.005 and 0.05% of toluene identified as being a developmental reproductive toxin based on animal studies.

HIMS Hazard Ratings Fire =0 Reactivity = 0 Health=1

All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

#### SECTION 3: PHYSICAL PROPERTY INFORMATION

Appearance: Brush on Paint, Odorless, grey

Melting or Freezing Point:-1°C, 30°FBoiling Range:100°C, 212°FVapor Pressure17.25 mmHG at 20°C

Vapor Density (AIR = 1):Greater than 1Solubility In Water (20°F):Completely miscibleSpecific Gravity (Water 1):1.0-1.5 gm/cc

#### **SECTION 4: FIRE AND EXPLOSION HAZARD DATA**

Flash Point: Not Applicable Flammable Limits In Air (%): Not Applicable

Auto Ignition Temperature: 455°C, Material does not burn.

**Extinguishing Media:** Use what is appropriate for the source of fire. **Special Firefighting Procedures:** Flammable. Self contained breathing apparatus.

Cool uninvolved cans to prevent rupture.

**DOT Proper Shipping Name:** Consumer Commodity ORM - D

**SECTION 5: HEALTH HAZARD DATA** 

Effects Of Overexposure:

**Inhalation:** Breathing difficulties, dizziness or light headiness, with high vapor concentration.

Eye Contact: Causes severe eye irritation. seek medical attention.

**Skin Contact:** Slight transient irritation.

Medical Conditions Aggravated: No known physical hazards.

Chronic Effects of Over Exposure: May cause eye irritation, slight skin irritation.

Emergency and First Aid Procedures:

Ingestion: If swallowed, do not induce vomiting. Give large quantities of water to drink and get medical

attention. Never give anything by mouth to an unconscious person.

**Skin:** Remove contaminated clothing and launder before reuse. Wash with soap and water. Get medical attention if irritation persists.

*Inhalation:* If inhaled, do not induce vomiting. Remove to fresh air, if not breathing give artificial respiration, preferably mouth-to-mouth. If breathing is difficult give oxygen. Get Medical attention.

Eyes: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get Medical attention.

#### **SECTION 6: REACTIVITY INFORMATION**

Stability: Stable

Hazardous Polymerization: Will not occur.

**Hazardous Decomposition Products:** If stored and handled in accordance with standard industrial practices non known. The following applies to the silicone content of the material.

Measurements have shown the formation of small amounts of formaldehyde at temperatures above

about 150°C though oxidation.

Incompatibility (Materials To Avoid): none known. Conditions To Avoid: none known.

#### **SECTION 7: SPILL OR LEAK PROCEDURES**

*If Spilled:* Prevent spills from entering surface waters, drains or sewers, open soil. Dam in any fluid that runs out using suitable material (earth). Spills of material that may reach surface waters must be reported to the United States Coast Guard.

**Waste Disposal Methods:** Dispose of according to regulations by incineration in a special waste incinerator Observe local state and federal regulations.

#### **SECTION 8: SPECIAL PROTECTION INFORMATION**

**Ventilation Type:** Use wth adequate ventilation. Local exhaust not necessary. **Protective Gloves**: Neoprene gloves and aprons, butyl rubber protective gloves. **Eye Protection:** Chemical splash goggles(ANSI Z-871 or approved equivalent)

Other Protective Equipment: Eyewash facility, Ventilation equipment should be explosion proof.

#### **SECTION 9: SPECIAL PRECAUTIONS**

Keep container tightly closed. Protect against the sun. Minimum temperature allowed during storage and transportation 0°C. 32°F.

Note to Physician: Allergic dermatitis or respiratory response in susceptible individuals may be delayed even weeks or months after frequent and/ or prolonged contact. Acute effects can include mucosa damage may contraindicate the use of gastric layage.

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DATE PREPARED 12/20/89 REVISED 02/23/06

# MATERIAL SAFETY DATA SHEET COTRONICS Duralco™ 6105SP

**Manufactures Name: COTRONICS CORPORATION** 

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

#### SECTION ONE

Chemical Name and Synonyms: Paint Chemical Formula: Mixture Chemical Family: Mixture

#### **SECTION 2: COMPOSITION INFORMATION**

A. Hazardous Materia	ds CAS No.	%	Osha PEL	TLV (nnm)	Vapor Pres. o (PSIG @ 70 F	`\
			(Ppm)	(ppm)	,	)
Propane	74-98-6	10	1000	100	123	
Isobutane	75-28-5	17	ΝE	ΝE	31	
* Methanol	67-56-1	0.3	200	200	96	
* Methylene Chloride	75-09-2	23	500	50	340	
Mineral Spirits	8052-413	12	500	100	2	
* Xylene 13	30-20-7 15	100		100	6	

<sup>\*</sup>These Materials are subject to reporting requirements of section 313 SARA Title III and 40 CFR 372. Aerosol contents under pressure of 55 (+/-) 5 psi.

*HIMS Hazard Ratings* Fire =4 Reactivity = 0 Toxicity = 2

All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

#### **SECTION 3: PHYSICAL PROPERTY INFORMATION**

Appearance: Typical aerosol spray paint

Melting Or Freezing Point: N/A

**Boiling Range:** - 43 °F to + 412 °F

Vapor Pressure Not greater than 70 (PSIG @ 70 °F)

Vapor Density (AIR = 1): Greater than 1

**Solubility In Water (20°F):** Not greater than 2.00/100 g

% Volatile (By Volume): 78 %

Specific Gravity (Water 1): Greater than 1.0 Evaporation Rate (BUTYL Acetate = 1): Faster than ether

#### SECTION 4: FIRE AND EXPLOSION HAZARD DATA

Flash Point: Approximately - 138°F (propellant)

OSHA Flammability Classification
Flammable Limits In Air (%):
Extinguishing Media:

Flammable Liquid Class 1- A
Lower 2.0, Upper 10.0
Foam Dry Chemical or CO2

**Special Firefighting Procedures:** Flammable. Self contained breathing apparatus.

Cool uninvolved cans to prevent rupture.

**DOT Proper Shipping Name:** Consumer Commodity ORM - D

**Unusual Fire and Explosion Hazards:** Avoid excessive heat. Isolate form electrical equipment, sparks, and open flames. Application to hot surfaces requires special precautions. Thermal decomposition may yield carbon monoxide and/or carbon dioxide, nitrogen oxides, and hydrogen chloride and may cause health hazards. Symptoms may not be immediately apparent. Vapors heavier than air may flow along surfaces to distant ignition sources and flashback.

#### **SECTION 5: HEALTH HAZARD DATA**

#### Effects Of Overexposure:

**Inhalation:** Breathing difficulties, dizziness or light headiness, with high vapor concentration. **Eye Contact:** Causes severe eye irritation. seek medical attention.

**Medical Conditions Aggravated:** Respiratory, brain and central nervous system conditions, dermatitis and other skin afflictions. Reports have linked methylene chloride exposure and cardiovascular problems.

**Chronic Effects of Over Exposure:** reports have associated repeated and prolonged over exposure to solvents with permanent damage to the brain and nervous system. Methylene chloride may produce an increase in carbon hemoglobin, and has caused liver and kidney effects in animals. Methylene chloride is a suspected carcinogen and is listed by the national toxicology programand the occupational safety and health administration.

#### Emergency and First Aid Procedures:

*Ingestion:* If swallowed, do not induce vomiting. Give large quantities of water to drink and get medical attention. Never give anything by mouth to an unconscious person.

**Skin:** Remove contaminated clothing and launder before reuse. Wash with soap and water. Get medical attention if irritation persists.

*Inhalation:* If inhaled, do not induce vomiting. Remove to fresh air, if not breathing give artificial respiration, preferably mouth-to-mouth. If breathing is difficult give oxygen. Get Medical attention.

**Eyes:** In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get Medical attention.

#### **SECTION 6: REACTIVITY INFORMATION**

Stability: Stable Hazardous Polymerization: Will not occur.

Hazardous Decomposition Products: Carbon Monoxide, Carbon Dioxide, Nitrogen oxides,

Hydrogen Chloride.

Incompatibility (Materials To Avoid): Strong oxidizers, strong acids or bases. Conditions To Avoid: Excessive heat, sparks and open flame.

#### **SECTION 7: SPILL OR LEAK PROCEDURES**

If Released or Spilled: For massive spills evacuate the area. For all spills eliminate ignition sources. Dike and contain spills with dry inert materials (sand, earth, etc.) Eliminate all sources of moisture, do not use water in clean up operations. Recover as much of free liquid as possible for disposal and use an absorbent to pick up the residue. Avoid discharge into a sewer or surface waters.

**Waste Disposal Methods:** Dispose of absorbed material or the free waste liquid in dry containers according to local state and federal regulations. DO NOT INCINERATE, do not flush into sewers. Containers may explode if heated. It is recommended that solid waste be disposed of only at approved hazardous disposal sites using approved contractors.

#### **SECTION 8: SPECIAL PROTECTION INFORMATION**

**Ventilation Type:** Work place areas require exhaust ventilation in accordance with OSHA regulations 29 CFR part 1910 (1070) to maintain vapor levels below the TLV (especially during spraying, misting, of heating). Use an approved high efficiency respirator of the full face canister type Exhaust levels should be maintained at least 1 fm.

. **Respiratory Protection:** Use approved high efficiency mechanical respirator to remove particles of overspray during application. In areas of restricted ventilation use high efficiency chemical/mechanical filters designed to remove a combination of particulates and vapor. In confined area use NIOSH approved organic vapor cartridges must be used in respirator

Protective Gloves: Neoprene gloves and aprons.

Eye Protection: Chemical splash goggles (ANSI Z-871 or approved equivalent)

Other Protective Equipment: Eyewash facility, Ventilation equipment should be explosion proof.

#### **SECTION 9: SHIPPING**

DOT Proper Shipping Name: Consumer Commodity - ORM-D

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**Warning:** This product contains a chemical or chemicals known to the state of California to cause cancer or cause birth defects or other reproductive harm.

### MATERIAL SAFETY DATA SHEET

#### **7020 CERAMIC PUTTY**

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

**SECTION ONE: PRODUCT IDENTIFICATION** 

Chemical Name and Synonyms: N/A Mixture

Chemical Family: Aluminosilicate, Alumina, Or Silicate

Chemical Formula: N/A

**Comments:** See Section 9

**SECTION 2: COMPOSITION INFORMATION** 

A. As Manufactured: WT. % TVL/PEL

Refractory Ceramics 50-70
Refractory Colloid\* 20-30
Water 10-20

B. After Normal Use See Section 8

All materials contained within are listed on the TSCA Inventory list. This product is compliant with the RoHS Directive.

#### **SECTION 3: PHYSICAL DATA**

	As Supplied	Cured
Boiling Point (°F):	212	N/A
Vapor Density (Air=1) :	>1	N/A
Specific Gravity Range (H2O = 1):	1	0.5 - 0.8
Percent Volatile by Volume:	70 - 80	N/A
(%) Solubility in Water:	Soluble	Insoluble
Evaporation Rate (H2O = 1):	1	N/A
Appearance and Odor:	Creamy Paste No Odor.	Solid
Vapor Pressure (mm Hg.):	17	N/A

#### **SECTION 4: FIRE AND EXPLOSION HAZARD DATA**

Extinguishing Media: N/A
Flash Point (Method Used): N/A
Flammable Limit: N/A
Unusual Fire And Explosive Hazards: LEL = N/A
Special Fire Fighting Procedures: UEL= N/A

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#### DATE PREPARED: 11/01/85 DATE REVISED: 02/23/06

#### **SECTION 5: HEALTH HAZARD DATA**

**Primary Route Of Entry:** Inhalation, Ingestion And Skin Irritation. **Effects Of Overexposure:** 

Currently, there are no known chronic health effects in humans from long term exposure to refractory ceramic fibers. Animal studies to date are inconclusive. However, based on limited testing, refractory ceramic fibers are a suspected carcinogen in laboratory animals. The Thermal Insulation Manufacturers Association (TIMA) is sponsoring animal inhalation studies as well as epidemiological studies of workers in the industry. Until definite answers become available, strict adherence to recommended safe work practices described elsewhere in this MSDS is advised. This product contains minor amounts of binders which burn out during first heat up. Emergency and First Aid Procedures Terminate Exposure.

**SECTION 6: FIRE, EXPLOSIVE AND REACTIVITY DATA** 

N/A

**SECTION 7: SPILL OR LEAK PROCEDURES** 

Recommended Procedures: N/A

Waste Disposal Method: Routine Housekeeping

#### **SECTION 8: SPECIAL PROTECTION INFORMATION**

Respiratory Protection (Specify Type) Dust respirator in compliance with OSHA Standard currently 29 CFR 1910.134 (NIOSH Approved, air purifying, half mask or full face-piece respirator with appropriate filter pad or cartridge(s)).

Ventilation: Local Exhaust: Follow OSHA Standard 29 CFR 1910.94

Mechanical (General): Follow OSHA Standard 29 CFR 1910.94

Protective Gloves: Recommended

Eve Protection: Goggles/Safety Glasses Recommended

Other Protective Equipment: Long Sleeve, Loose Fitting Clothing and Barrier Cream

Material does not appear on NTP and/or LAC lists of reports for Carcinogens

#### **SECTION 9: SPECIAL PRECAUTIONS**

#### Precautions To Be Taken During First Exposure To Heat:

Trace temporary organic binders will burn off during the first exposure to heat. (500 - 1000°F) carbon monoxide, carbon dioxide, oxides of nitrogen, reactive hydrocarbons and a small amount of formaldehyde may accompany binder burn-off. Use adequate ventilation or other precautions to eliminate vapors resulting from binder burn-off. Exposure to burn-off fumes may cause respiratory tract irritation.

#### Precautions To Be Taken After Use And Upon Removal:

This product as manufactured is an aluminosilicate which could transform upon heating to mullet and crystobalite (a form of crystalline silica). Removal of this product after use may result in the generation of dust. Repeated inhalation of respirable free crystalline silica dust may cause delayed lung injury (silicosis). The recommended TLV/PEL for free crystalline silica is derived from the formula: 10 mg/cu m

1/2(----)#

% Respirable quartz + 2

<sup>\* (</sup>Water Base)

<sup>\*(</sup>Reference 1984-85 ACGIH TLV Booklet, Page 34). Appropriate ventilation should be provided and protective equipment should be worn in compliance with OSHA standard currently 29 CFR 1910.134 (NIOSH approved, air purifying, half mask or full face-piece respirator with appropriate filter pad or cartridge(s)).

### MATERIAL SAFETY DATA SHEET COTRONICS

#### 702-2 PL PLACE IT

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

#### **SECTION ONE**

Chemical Name And Synonyms: N/A Mixture

Chemical Family: Aluminosilicate, Alumina, Or Silicate

Chemical Formula: N/A

Comments: See Section 9

#### **SECTION 2: COMPOSITION INFORMATION**

A. As Manufactured WT. % TVL/PEL
Refractory Ceramic Fiber 100 2 f / cc
B. After Normal Use See Section 8

All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

#### **SECTION 3: PHYSICAL DATA**

Boiling Point (°F): N/A
Vapor Density (Air=1): N/A
Specific Gravity Range (H2O = 1): N/A
Percent Volatile by Volume: N/A
(%) Solubility in Water: Insoluble
Evaporation Rate (H2O = 1): N/A

Appearance and Odor: NO ODOR. 372 UHT WET MAT

**Vapor Pressure (mm Hg.):** 0.2 - 1.2

#### SECTION 4: FIRE AND EXPLOSION HAZARD DATA

Extinguishing Media: Flash Point (Method Used): Flammable Limit: N/A N/A N/A

Unusual Fire And Explosive Hazards: Special Fire Fighting Procedures:

Lel = N/A Uel = N/A

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#### **SECTION 5: HEALTH HAZARD DATA**

**Primary Route Of Entry:** Inhalation, Ingestion And Skin Irritation **Effects Of Overexposure:** 

Currently, there are no known chronic health effects in humans from long term exposure to refractory ceramic fibers. Animal studies to date are inconclusive. However, based on limited testing, refractory ceramic fibers are a suspected carcinogen in laboratory animals. The Thermal Insulation Manufacturers Association (TIMA) is sponsoring animal inhalation studies as well as epidemiological studies of workers in the industry. Until definite answers become available, strict adherence to recommended safe work practices described elsewhere in this MSDS is advised. This product contains minor amounts of binders which burn out during first heat up. Emergency and First Aid Procedures Terminate Exposure.

**SECTION 6: FIRE, EXPLOSIVE AND REACTIVITY DATA** 

N/A

**SECTION 7: SPILL OR LEAK PROCEDURES** 

Recommended Procedures: N/A

Waste Disposal Method: Routine Housekeeping

#### **SECTION 8: SPECIAL PROTECTION INFORMATION**

Respiratory Protection (Specify Type) Dust respirator in compliance with OSHA STANDARD currently 29 CFR 1910.134 (NIOSH Approved, air purifying, half mask or full face-piece respirator with appropriate filter pad or cartridge (s)).

Ventilation: Local Exhaust: Follow OSHA Standard 29 CFR 1910.94

Mechanical (General): Follow OSHA Standard 29 CFR 1910.94

Protective Gloves: Recommended

Eye Protection: Goggles/Safety Glasses Recommended

Other Protective Equipment: Long Sleeve, Loose Fitting Clothing and Barrier Cream

Material does not appear on NTP and/or LAC lists of reports for Carcinogens

#### SECTION 9: SPECIAL PRECAUTIONS

#### Precautions To Be Taken During First Exposure To Heat:

Trace temporary organic binders will burn off during the first exposure to heat. (500-1000°F) carbon monoxide, carbon dioxide, oxides of nitrogen, reactive hydrocarbons and a small amount of formaldehyde may accompany binder burn-off. Use adequate ventilation or other precautions to eliminate vapors resulting from binder burn-off. Exposure to burn-off fumes may cause respiratory tract irritation.

#### Precautions To Be Taken After Use And Upon Removal:

This product as manufactured is an aluminosilicate which could transform upon heating to mullite and crystobalite (a form of crystalline silica). Removal of this product after use may result in the generation of dust. Repeated inhalation of respirable free crystalline silica dust may cause delayed lung injury (silicosis). The recommended TLV/PEL for free crystalline silica is derived from the formula: 10 mg/cu m

1/2(----)#

% Respirable quartz + 2

DATE PREPARED: 11/01/85 DATE REVISED: 02/23/06

HIMS RATING Health = 1 Fire = 0 Reactivity = 0 HAZARD RATING: 0 = Insignificant 1 = Non-Toxic, Slight 2 = Moderate 3 = High 4 = Extreme

<sup>\*(</sup>Reference 1984-85 ACGIH TLV Booklet, Page 34). Appropriate ventilation should be provided and protective equipment should be worn in compliance with OSHA standard currently 29 CFR 1910.134 (NIOSH approved, air purifying, half mask or full face-piece respirator with appropriate filter pad or cartridge(s).

<sup>\*</sup> Note for 372 UHT thermal decomposition may release corrosive HCl fumes.

### **MATERIAL SAFETY DATA SHEET**

### COTRONICS CORPORATION 7025 Aluminum Putty

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

**SECTION ONE** 

Chemical Name And Synonyms: N/A Mixture

Formula: N/A Comments: N/A

Chemical Family: Base: Proprietary Aluminum Composition

Binder: Proprietary Silicate Alumina Bond

**SECTION 2: COMPOSITION INFORMATION** 

Part A Base CAS# WT. %: TVL/PEL:

Aluminum 7429-90-5 65 - 75

All materials contained within are listed on the TSCA Inventory list.

#### See page 2 for binder information

This product is compliant with the RoHS Directive.

#### **SECTION 3: PHYSICAL DATA**

**Boiling Point (°F):** 212°F as mixed

Specific Gravity Range (H2O=1): 3.0-3.0
Vapor Pressure (mm Hg.): N/A
Vapor Density (Air=1): N/A
Volatile By Volume (%): 10 -20
Solubility in Water: soluble
Evaporation Rate (=1): N/A

Appearance/Odor: smooth grey putty

Volatile Constituent: Water

#### **SECTION 4: FIRE AND EXPLOSION HAZARD DATA**

Extinguishing Media: N/A
Flash Point (Method Used): N/A
Flammable Limit: N/A
Unusual Fire and Explosive Hazards: LEL = N/A
Special Fire Fighting Procedures: UEL = N/A

#### **SECTION 5: HEALTH HAZARD DATA**

Effects Of Overexposure: Skin Contact: Slight dermatological irritation after prolonged skin contact.

**Emergency And First Aid Procedures:** Flush eyes and skin with copious quantities of water. Get immediate medical attention for eyes. If swallowed, consult physician immediately.

**SECTION 6: FIRE, EXPLOSIVE AND REACTIVITY DATA** 

Stability: Stable Incompatibility (Materials To Avoid): N/A Hazardous Decomposition Products: None

Hazardous Polymerization: Will Not Occur

#### **SECTION 7: SPILL OR LEAK PROCEDURES**

**Steps To Be Taken In Case Material Is Released Or Spilled:** Sweep up spilled powders and dispose in approved industrial waste container. Hose spilled liquids or mixed adhesive with water, immediately. 950,952, 954 adhesives are not water soluble after drying. **Waste Disposal Method:** Approved industrial waste disposal means.

#### **SECTION 8: SPECIAL PROTECTION INFORMATION**

Respiratory Protection (Specify Type): NIOSH approved\*. Respirators

recommended for spray applications.

**Ventilation:** Local Exhaust: Vacuuming with the vacuum exhaust passing through a high efficiency particulate arresting (HEPA) filter is the exhaust is discharged into the workplace.

**Protective Gloves:** Recommended. **Eye Protection:** Recommended.

Other Protective Equipment: Rubber aprons, lab coats, etc. to protect clothing.

#### **SECTION 9: SPECIAL PRECAUTIONS**

**Precautions To Be Taken In Handling And Storing:** Keep container closed and avoid getting wet until ready to use.

**Other Precautions:** Wash Hands Thoroughly Before Eating or Smoking. Avoid Getting Powder In Body Openings, Including Cuts, Sores, Mouth, Etc. Use With Adequate Ventilation. Avoid Repeated Skin Contact. Wash Skin Thoroughly After Handling.

**Precautions To Be Taken After Use And Upon Removal:** This product as manufactured contains Silicate which could transform upon heating to mullet and crystobalite (a form of crystalline silica). Removal of this product after use may result in the generation of dust. Repeated inhalation of respirable free crystalline silica dust may cause delayed lung injury (silicosis). The recommended TLV/PEL for free crystalline silica is derived from the formula: 10 mg/cu m

1/2(-----)#

% Respirable quartz + 2

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DATE PREPARED: 01/01/89 DATE REVISED: 02/23/06 Page 1 of 2

HIMS RATING Health = 1 Fire = 0 Reactivity = 0 HAZARD RATING: 0 = Insignificant 1 = Non-Toxic, Slight 2 = Moderate 3 = High 4 = Extreme

<sup>\*(1984-85</sup> ACGIH TLV Booklet, Page 50)

<sup>\*(</sup>Reference 1984-85 ACGIH TLV Booklet, Page 34). Appropriate ventilation should be provided and protective equipment should be worn in compliance with OSHA standard currently 29 CFR 1910.134 (NIOSH approved, air purifying, half mask or full face-piece respirator with appropriate filter pad or cartridge(s)).

## MATERIAL SAFETY DATA SHEET TRADE NAME

#### 7025 Aluminum Putty Part B

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

#### SECTION ONE: PRODUCT IDENTIFICATION

Chemical Name And Synonyms: N/A Mixture

Chemical Family:Alumina, Phosphate or SilicaChemical Family:Refractory Ceramic Colloid

Proprietary Silicate, Phosphate, Alumina, Colloid Bond.

#### **SECTION 2: COMPOSITION INFORMATION**

	As Manufactured:	WT. %	TVL/PEL
A.	Liquid Binder or Thinner		
	Refractory Ceramic Colloid	20 - 50	N/A
	Water	50 - 80	
В.	After Normal Use See Section 8		
C.	Mist or Dried dust from spraying	30 - 50	10 mg/m <sup>3</sup>
	(Not formed in normal use)		

All Materials contained within are located on the TSCA Inventory List This product is compliant with the RoHS Directive.

#### **SECTION 3: PHYSICAL DATA**

	As Supplied	As Cured
Boiling Point (§F):	212ºF	N/A
Specific Gravity (H2O=1):	1.2 - 1.4	1.2-2.5
Vapor Pressure (mm Hg.):	0.2-1.2	N/A
Vapor Density (Air=1):	>1	N/A
Percent Volatile By Volume:	20-50	N/A
Solubility In Water:	Soluble	Insoluble
Evaporation Rate (H2O=1):	1	N/A
Appearance/Odor:	Clear or Opalescent liquid	Solid
	/No Odor	No Odor

#### **SECTION 4: FIRE AND EXPLOSION HAZARD DATA**

Extinguishing Media: N/A
Flash Point (Method Used): N/A
Flammable Limit: N/A
Unusual Fire and Explosive Hazards: LEL = N/A
Special Fire Fighting Procedures: UEL = N/A

#### **SECTION 5: HEALTH HAZARD DATA**

Primary Route Of Entry: Inhalation, Ingestion, Eyes and Skin Irritation.

Effects Of Overexposure: Long term overexposure to inhalation of mists or dust of dried down particles may cause tissue response in the lung (Pneumoconiosis).

Emergency & First Aid Procedures: Terminate exposure. Flush eyes with water for 15 minutes. Call a doctor

**SECTION 6: FIRE, EXPLOSIVE AND REACTIVITY DATA** 

N/A

SECTION 7: SPILL OR LEAK PROCEDURES

Recommended Procedures: Routine Housekeeping

Waste Disposal Method: N/A

#### **SECTION 8: SPECIAL PROTECTION INFORMATION**

**Respiratory Protection (Specify Type):** Respiratory protection is not normally needed since the volatility and toxicity are low. If significant mists or aerosols are generated, wear a NIOSH approved or equivalent respirator, (ANSI Z-88.2, 1980 for requirements and selection).

Ventilation: Local Exhaust: Follow OSHA Standard 29 CFR 1910.94. Mechanical (General): Follow OSHA Standard 29 CFR 1910.94.

Protective Gloves: Recommended.

Eye Protection: Goggles/Safety Glasses Recommended.

Other Protective Equipment: As required to meet applicable OSHA Standards .

#### **SECTION 9: SPECIAL PRECAUTIONS**

Precautions to be Taken After Use and Upon Removal: This product as manufactured contains a Silicate which could transform upon heating to mullet and crystobalite (a form of crystalline silica). Removal of this product after use may result in the generation of dust. Repeated inhalation of respirable free crystalline silica dust may cause delayed lung injury (silicosis). The recommended TLV/PEL for free crystalline silica is derived from the formula: 10 mg/cu m

1/2(-----)#
% Respirable quartz + 2

\*(Reference 1984-85 ACGIH TLV Booklet, Page 34). Appropriate ventilation should be provided and protective equipment should be worn in compliance with OSHA standard currently 29 CFR 1910.134 (NIOSH approved, air purifying, half mask or full face-piece respirator with appropriate filter pad or cartridge(s)).

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DATE PREPARED: 11/01/85 DATE REVISED: 02/23/06

Page 2 of 2

### MATERIAL SAFETY DATA SHEET

### **Cotronics Ceramic Adhesives**

### **Two Component**

7030 Hi-Seal Silica Ceramic Adhesive

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

**SECTION ONE:** 

Chemical Name And Synonyms: N/A Mixture Chemical Family: N/A Mixture Alumina, Silica

Chemical Formula: N/A

Part A Refractory Ceramic Composition (See Type Above)

Part B Water

**SECTION 2: COMPOSITION INFORMATION** 

A. Manufactured WT. % TVL/PEL

Part A Powder:

Water

Refractory Ceramic Powder 100 5 mg/ Cu M

Part B Liquid Binder

100

B. After Normal Use See Section 8

**Note** Other non hazardous materials will not be listed separately

All materials contained within are listed on the TSCA Inventory list. This product is compliant with the RoHS Directive.

#### **SECTION 3: PHYSICAL DATA**

	As Supplied	Cured
Boiling Point (°F) :	212	N/A
Vapor Density (Air=1):	>1	N/A
Specific Gravity Range (H2O = 1):	1.5 - 3	1.2 - 2.5
Percent Volatile by Volume:	20 - 50	N/A
(%) Solubility in Water:	Soluble	Insoluble
Evaporation Rate (H2O = 1):	1	N/A
Appearance and Odor:	Creamy Paste No Odor.	Solid
Vapor Pressure (mm Hg.):	0.2 - 1.2	N/A

#### **SECTION 4: FIRE AND EXPLOSION HAZARD DATA**

Extinguishing Media: N/A
Flash Point (Method Used): N/A

Flammable Limit: N/A

**Unusual Fire and Explosive Hazards:** N/A **Special Fire Fighting Procedures:** LEL UEL

#### **SECTION 5: HEALTH HAZARD DATA**

**Effects of Overexposure:** Slight dermatological irritation after prolonged skin contact. *Emergency and First Aid Procedures:* Flush eyes and skin with copious quantities of water. Get immediate medical attention for eyes. If swallowed, consult physician immediately.

#### **SECTION 6: FIRE, EXPLOSIVE AND REACTIVITY DATA**

Stability: Stable Incompatibility (Materials to Avoid): Strong Acids

Hazardous Decomposition Products: None

Hazardous Polymerization: Will Not Occur

#### SECTION 7: SPILL OR LEAK PROCEDURES

#### Steps To Be Taken In Case Material Is Released Or Spilled:

Sweep up spilled powder and dispose in approved industrial waste container. Hose spilled wet cement paste with water, immediately. Cement is not water soluble after setting up. Note Liquid is mild acid.

Waste Disposal Method: Approved industrial waste disposal means.

#### **SECTION 8: SPECIAL PROTECTION INFORMATION**

Respiratory Protection (Specify Type): NIOSH approved\*

Respirators recommended for spray applications.

Ventilation: Local Exhaust:

Vacuuming with the vacuum exhaust passing through a high efficiency particulate

arresting (HEPA) filter is the exhaust is discharged into the workplace.

Protective Gloves: Recommended Eye Protection: Recommended

Other Protective Equipment: Rubber aprons, lab coats, etc. to protect clothing.

#### **SECTION 9: SPECIAL PRECAUTIONS**

**Precautions to be Taken in Handling and Storing:** Keep container closed and avoid getting wet until ready to use.

Other Precautions: Wash Hands Thoroughly Before Eating or Smoking. Avoid

Getting Powder In Body Openings, Including Cuts, Sores, Mouth, Etc. **Precautions to be Taken After use and Upon Removal:** This product as

manufactured contains Silicate which could transform upon heating to mullet and crystobalite (a form of crystalline silica). Removal of this product after use may result in the generation of dust. Repeated inhalation of respirable free crystalline silica dust may cause delayed lung injury (silicosis). The recommended TLV/PEL for free crystalline silica is derived from the formula: 10 mg/cu m

1/2(-----)#

% Respirable quartz + 2

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DOT ID. Number: Not Regulated

DATE PREPARED: 11/01/85 DATE REVISED: 02/23/06

HIMS RATING Health = 1 Fire = 0 Reactivity = 0 HAZARD RATING: 0 = Insignificant 1 = Non-Toxic, Slight 2 = Moderate 3 = High 4 = Extreme

<sup>\*(</sup>Reference 1984-85 ACGIH TLV Booklet, Page 34). Appropriate ventilation should be provided and protective equipment should be worn in compliance with OSHA standard currently 29 CFR 1910.134 (NIOSH approved, air purifying, half mask or full face-piece respirator with appropriate filter pad or cartridge(s)).

### MATERIAL SAFETY DATA SHEET DURABOND 7031

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

**SECTION ONE: PRODUCT IDENTIFICATION** 

Chemical Name and Synonyms: N/A Mixture

Chemical Family: Alumina

Chemical Formula: N/A Refractory Ceramic Composition

Comments: See Section 9

**SECTION 2: COMPOSITION INFORMATION** 

A. As Manufactured: WT. % TVL/PEL

Refractory Ceramics 50-70 Refractory Colloid\* 20-30

#### B. After Normal Use See Section 8

\* (Water Base)

All materials contained within are listed on the TSCA Inventory list. This product is compliant with the RoHS Directive.

#### **SECTION 3: PHYSICAL DATA**

	As Supplied	Cured
Boiling Point (°F) :	212	N/A
Vapor Density (Air=1):	>1	N/A
Specific Gravity Range (H2O = 1):	1.4-1.7	0.6 - 0.8
Percent Volatile by Volume:	70 - 80	N/A
(%) Solubility in Water:	Soluble	Insoluble
Evaporation Rate (H2O = 1):	1	N/A
Appearance and Odor:	Creamy Paste, No Odor.	Solid
Vapor Pressure (mm Hg.) :	17	N/A
VOLATILE ORGANIC CONTENT	VOC = O	

#### **SECTION 4: FIRE AND EXPLOSION HAZARD DATA**

Extinguishing Media: N/A
Flash Point (Method Used): N/A
Flammable Limit: N/A
Unusual Fire And Explosive Hazards: LEL = N/A
Special Fire Fighting Procedures: UEL= N/A

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DATE PREPARED: 11/01/85 DATE REVISED: 02/23/06

#### **SECTION 5: HEALTH HAZARD DATA**

**Primary Route of Entry:** Inhalation, Ingestion and Skin Irritation.

**Emergency and First Aid Procedures:** Flush eyes with copious quantities of water. Get immediate medical attention for eyes. If swallowed, consult a physician immediately. **Effects Of Overexposure:** 

Slight dermatological irritation after prolonged skin contact. Can be irritating to eyes. **Delayed Effects**: No known chronic hazards. Not listed by OSHA, NTP or IARC as a

carcinogen

#### **SECTION 6: FIRE, EXPLOSIVE AND REACTIVITY DATA**

Stability Stable

Hazardous Decomposition Products None Hazardous Polymerization Will not occur

#### **SECTION 7: SPILL OR LEAK PROCEDURES**

**Recommended Procedures:** Dispose of in approved industrial waste container Hose spilled wet cement paste with water. Cement is not water soluble after setting up **Waste Disposal Method:** Approved industrial waste disposal means.

#### **SECTION 8: SPECIAL PROTECTION INFORMATION**

**Respiratory Protection** (Specify Type) Dust respirator in compliance with OSHA Standard currently 29 CFR 1910.134 (NIOSH Approved, air purifying, half mask or full face-piece respirator with appropriate filter pad or cartridge(s)).

Ventilation: Local Exhaust: Follow OSHA Standard 29 CFR 1910.94 Mechanical (General): Follow OSHA Standard 29 CFR 1910.94

Protective Gloves: Recommended

Eye Protection: Goggles/Safety Glasses Recommended

Other Protective Equipment: Long Sleeve, Loose Fitting Clothing and Barrier Cream

Material does not appear on NTP and/or LAC lists of reports for Carcinogens

#### **SECTION 9: SPECIAL PRECAUTIONS**

#### Precautions To Be Taken in Handling and Storage

Keep tubes / containers sealed and avoid getting wet until ready to use. Store away from excessive heat (eq. Steam pipes, radiators)

#### Precautions To Be Taken After Use and Upon Removal:

This product as manufactured is an aluminosilicate which could transform upon heating to mullet and crystobalite (a form of crystalline silica). Removal of this product after use may result in the generation of dust. Repeated inhalation of respirable free crystalline silica dust may cause delayed lung injury (silicosis). The recommended TLV/PEL for free crystalline silica is derived from the formula: 10 mg/cu m

½(-----)#

% Respirable quartz + 2

<sup>\*(</sup>Reference 1984-85 ACGIH TLV Booklet, Page 34). Appropriate ventilation should be provided and protective equipment should be worn in compliance with OSHA standard currently 29 CFR 1910.134 (NIOSH approved, air purifying, half mask or full face-piece respirator with appropriate filter pad or cartridge(s)).

## MATERIAL SAFETY DATA SHEET COTRONICS DURABOND ADHESIVES

#### **Durabond 7032 Stainless**

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

**SECTION ONE: General Information** 

Chemical Name And Synonyms: N/A Mixture

Formula: N/A

**Chemical Family:** Proprietary Metallic Composition **Binder:** Proprietary Silicate, Alumina, Bond

#### **SECTION 2: COMPOSITION INFORMATION**

 As Supplied:
 CAS #
 WT. %
 TVL/PEL

 Nickel
 744-002-0
 0 - 15
 1 mg/cu m

 Stainless Steel
 20 - 40

Fe 7439-89-6 Mo 7439-98-7 Ch 7440-47-3 Ni 7440-02-0

Refractory Ceramic Colloid proprietary 30-57

This product is compliant with the RoHS Directive. (1984-85 ACGIH TLV Booklet, Page 50).

#### **SECTION 3: PHYSICAL DATA**

Boiling Point (°F): N/A
Specific Gravity Range (H2O=1): 2.0 - 3.0
Vapor Pressure (mm Hg.): N/A
Vapor Density (Air=1): N/A
Percent Volatile By Volume (%): 10 - 30
Solubility in Water: Soluble
Evaporation Rate (=1): N/A

Appearance/Odor: Smooth Grey Putty

Volatile Constituent: Water

#### SECTION 4: FIRE AND EXPLOSION HAZARD DATA

Extinguishing Media: N/A
Flash Point (Method Used): N/A
Flammable Limit: N/A
Unusual Fire and Explosive Hazards: LEL = N/A
Special Fire Fighting Procedures: UEL= N/A

#### SARA Section 313 Supplier Notification:

This product contains the following chemical(s) subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1968 and of 40 CFR 372: Nickel, Chromium. Refer to the Hazardous Ingredients section of this MSDS for the appropriate CAS numbers.

#### **SECTION 5: HEALTH HAZARD DATA**

Nickel: LD50: Oral Rat > 5000 mg/kg.

IARC found there was inadequate evidence that metallic nickel or chromium is carcinogenic to humans but since there was sufficient evidence that is carcinogenic to animals, IARC concluded that metallic nickel or chromium is possibly carcinogenic to humans. Epidemiological studies of workers exposed to nickel or chromium powder and to dust and fumes generated in the production of nickel alloys and of stainless steel have not indicated the presence of a significant respiratory cancer hazard.

#### **Effects Of Overexposure:**

Skin Contact: Repeated contact with metallic nickel can cause nickel sensitivity and allergic skin rashes.

**Emergency And First Aid Procedures:** Flush eyes and skin with copious quantities of water. Get immediate medical attention for eyes. If swallowed, consult physician immediately.

#### **SECTION 6: FIRE, EXPLOSIVE AND REACTIVITY DATA**

Stability: Stable Incompatibility (Materials to Avoid): N/A Hazardous Decomposition Products: None

Hazardous Polymerization: Will Not Occur

#### **SECTION 7: SPILL OR LEAK PROCEDURES**

**Steps To Be Taken In Case Material Is Released Or Spilled:** Sweep up spilled powder and dispose in approved industrial waste container. Hose spilled Adhesive with water, immediately. 950 Adhesive is not water soluble after drying. **Waste Disposal Method:** Approved industrial waste disposal means.

#### **SECTION 8: SPECIAL PROTECTION INFORMATION**

**Respiratory Protection (Specify Type):** NIOSH approved\* Respirators recommended for spray applications.

**Ventilation:** Local Exhaust: Vacuuming with the vacuum exhaust passing through a high efficiency particulate arresting (HEPA) filter is the exhaust is discharged into the workplace.

**Protective Gloves:** Recommended. **Eye Protection:** Recommended.

Other Protective Equipment: Rubber aprons, lab coats, etc. to protect clothing.

#### **SECTION 9: SPECIAL PRECAUTIONS**

**Precautions To Be Taken In Handling And Storing:** Keep container closed and avoid getting wet until ready to use.

Other Precautions: Wash Hands Thoroughly Before Eating Or Smoking. Avoid Getting Powder In Body Openings, Including Cuts, Sores, Mouth, Etc. Use With Adequate Ventilation. Avoid Repeated Skin Contact. Wash Skin Thoroughly After Handling.

DATE PREPARED: 1/01/89 DATE REVISED: 02/23/06

HIMS RATING Health = 1 Fire = 0 Reactivity = 0 HAZARD RATING: 0 = Insignificant 1 = Non-Toxic, Slight 2 = Moderate 3 = High 4 = Extreme

<sup>\*</sup>Please note all materials contained are listed on the EPA TSCA Inventory list.

<sup>\*(</sup>Reference 1984-85 ACGIH TLV Booklet, Page 34). Appropriate ventilation should be provided and protective equipment should be worn in compliance with OSHA standard currently 29 CFR 1910.134 (NIOSH approved, air purifying, half mask or full face-piece respirator with appropriate filter pad or cartridge(s)).

## MATERIAL SAFETY DATA SHEET COTRONICS ALUMINUM EPOXY PUTTY

#### **DURALCO 7034**

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

**SECTION ONE: PRODUCT IDENTIFICATION** 

Chemical Family: CAS %

Epoxy Resin 50 - 70%S Stainless: Fe 7439-89-6 30 - 50%

Mo 7439 -98-7 Ch 7440-47-3 Ni 7440-02-0

The Remaining Components are Proprietary

**SECTION 2: COMPOSITION INFORMATION** 

*Material:* Proprietary Modified Epoxy Resin

Other non-hazardous materials will not be listed separately

Nature of Hazard: Irritant

All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

#### **SECTION 3: PHYSICAL PROPERTY INFORMATION**

Appearance Odor: Viscous Grey liquid

 Melting Or Freezing Point:
 N/A

 Boiling Point:
 N/A

 Vapor Pressure (mm Hg):
 N/A

 Vapor Density (Air=1):
 >1

Solubility In Water:

% Volatile (By Weight):

Specific Gravity (Water=1):

1.5 - 2.0

Evaporation Rate (Butyl Acetate = 1): <1

**SECTION 4: FIRE AND EXPLOSION HAZARD DATA** 

Flash Point: >295°F Auto Ignition Temp: N/A Lower Explosion Limit (%): N/A Upper Explosion Limit (%): N/A

Extinguishing Media: Foam, C02, Dry Chemical: Water Spray

**SECTION 5: HEALTH HAZARD DATA** 

**Effects Of Overexposure:** *Inhalation:* Mist or vapor can irritate the nose and throat. *Eye Contact:* Substantially irritating to eyes. *Skin Contact:* Substance is moderately irritating and can cause superficial burns after prolonged contact. Not absorbed in toxic amounts *Ingestion:* Harmful if swallowed.

Effects: Prolonged or repeated exposure can cause allergic reaction.

IARC found there was inadequate evidence that metallic nickel or chromium is carcinogenic to humans but since there was sufficient evidence that is carcinogenic to animals, IARC concluded that metallic nickel or chromium is possibly carcinogenic to humans. Epidemiological studies of workers exposed to nickel or chromium powder and to dust and fumes generated in the production of nickel alloys and of stainless steel have not indicated the presence of a significant respiratory cancer hazard.

#### **SECTION 6: EMERGENCY AND FIRST AID PROCEDURES**

**Inhalation:** Move subject to fresh air. Give artificial respiration if breathing has stopped. **Eye And Skin Contact:** Flush eyes with a large amount of water for at least 15 minutes. Get prompt medical attention. Wash skin thoroughly with soap and water. Remove and wash clothing before reuse.

*Ingestion:* If swallowed dilute by giving 2 glasses of water to drink. See a physician. Never give anything by mouth to an unconscious person.

#### SECTION 7: REACTIVITY INFORMATION

Stability: Stable Hazardous Polymerization: Will not occur

#### **SECTION 8: SPILL OR LEAK PROCEDURES**

Dike and absorb spill on inert material (sand, earth, etc.). Transfer diking material to containers for disposal. Wear protective clothing. Use breathing apparatus (MSHA/NIOSH-approved, pressure-demand, self-contained) or air mask for large spills in confined area. Wash clothing before reuse. Destroy clothing that cannot be decontaminated (i.e. Shoes). *Waste Disposal Methods:* Incinerate liquid in approved equipment. Landfill or incinerate contaminated diking material in accordance with local, state and federal regulations.

#### **SECTION 9: SPECIAL PROTECTION INFORMATION**

Ventilation Type: Normal room ventilation.

**Respiratory Protection:** None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH-approved or equivalent) suitable for concentrations and types of air contaminants encountered.

Protective Gloves: Impervious.

Eye Protection: Chemical splash goggles(ANSI Z-871 or approved equivalent).

Other Protective Equipment: Eyewash facility.

#### **SECTION 10: SPECIAL PRECAUTIONS**

Store away from excessive heat (e.g., steam-pipes, radiators, from sources of ignition, and from reactive materials). Do not store near food or feed. Corrosive to copper and brass on long storage.

Corrosive Material: Avoid all eye and skin contact.

*Misc Info:* The use of this and auxiliary materials should be confined to designated work areas. Emptied containers may still contain hazardous residues.

**Note To Physician:** Allergic dermatitis or respiratory response in susceptible individuals may be delayed even weeks or months after frequent and/or prolonged contact. Acute effects can include mucosa damage, severe laryngeal edema, and shock associated with corrosive agents. Possible mucosa damage may contraindicate the use of gastric lavage.

#### SARA Section 313 Supplier Notification:

This product contains the following chemical(s) subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1968 and of 40 CFR 372: Nickel, Chromium. Refer to the Hazardous Ingredients section of this MSDS for the appropriate CAS numbers.

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DATE PREPARED: 11/01/83 DATE REVISED: 02/23/06

Page 1 of 2

HIMS RATING Health = 2 Fire = 0 Reactivity = 0 HAZARD RATING: 0 = Insignificant 1 = Non-Toxic, Slight 2 = Moderate 3 = High 4 = Extreme

#### **DURALCO 7034 HARDENER**

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

#### **SECTION ONE:**

Chemical Name And Synonyms: N/A Mixture\*

Formula: N/A

Chemical Family: Amine Complex.

#### **SECTION 2: PHYSICAL PROPERTY INFORMATION**

Boiling Point: N/A Vapor Density (Air=1): >1

Solubility In Water:Negligible% Volatile (By Weight):NegligibleMelting Or Freezing Point:N/AVapor Pressure (mm Hg):N/ASpecific Gravity (Water=1):0.93 - 1.30

Evaporation Rate (Butyl Acetate=1): <1

Appearance/Odor: Black / Amine odor All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

#### **SECTION 3: FIRE AND EXPLOSION HAZARD DATA**

Flash Point: >200°F
Auto Ignition Temp: N/A
Lower Explosion Limit (%): N/A
Upper Explosion Limit (%): N/A

Extinguishing Media: Foam, C02, Dry Chemical: Water Spray

#### **SECTION 4: HEALTH HAZARD DATA**

**Effects Of Overexposure:** 

*Inhalation:* Mist/Vapor can irritate the nose and throat.

**Eye Contact:** Substantially irritating to eyes.

Skin Contact: Substance is moderately irritating and can cause superficial burns after

prolonged contact.

Ingestion: Harmful if swallowed.

**Delayed Effects:** Prolonged or repeated exposure can cause allergic reaction.

#### SECTION 5: EMERGENCY AND FIRST AID PROCEDURES

*Inhalation:* Move subject to fresh air. Give artificial respiration if breathing has stopped. *Eye And Skin Contact:* Flush eyes with a large amount of water for at least 15 minutes. Get prompt medical attention. Wash skin thoroughly with soap and water. Remove and wash clothing before reuse.

*Ingestion:* If swallowed dilute by giving 2 glasses of water to drink. See a physician. Never give anything by mouth to an unconscious person.

#### **SECTION 6: REACTIVITY INFORMATION**

Stability: Stable

Hazardous Polymerization: Will not occur

#### **SECTION 7: SPILL OR LEAK PROCEDURES**

Dike and absorb spill on inert material (sand, earth, etc.). Transfer diking material to containers for disposal. Wear protective clothing. Use breathing apparatus (MSHA/NIOSH approved, pressure-demand, self-contained) or air mask for large spills in confined area. Wash clothing before reuse. Destroy clothing that cannot be decontaminated (i.e. Shoes).

**Waste Disposal Methods:** Incinerate liquid in approved equipment. Landfill or incinerate contaminated diking material in accordance with local, state and federal regulations.

#### **SECTION 8: SPECIAL PROTECTION INFORMATION**

**Ventilation Type:** Normal room ventilation.

**Respiratory Protection:** None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH approved or equivalent) suitable for concentrations and types of air contaminants encountered.

Protective Gloves: Impervious.

Eye Protection: Chemical splash goggles (ANSI Z-871 or approved equivalent).

Other Protective Equipment: Eyewash facility.

#### **SECTION 9: SPECIAL PRECAUTIONS**

Store away from excessive heat (e.g., steam-pipes, radiators, from sources of ignition, and from reactive materials). Do not store near food or feed. Avoid all eye and skin contact.

*Misc Info:* The use of this and auxiliary materials should be confined to designated work areas. Emptied containers may still contain hazardous residues.

**Note To Physician:** Allergic dermatitis or respiratory response in susceptible individuals may be delayed even weeks or months after frequent and/or prolonged contact. Acute effects can include mucosa damage, severe laryngeal edema, and shock associated with corrosive agents. Possible mucosa damage may contraindicate the use of gastric layage.

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DATE PREPARED: 11/01/85 DATE REVISED: 02/23/06

### PROPRIETARY MATERIAL SAFETY DATA SHEET COTRONICS EPOXY RESIN

#### **DURALCO 7035**

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

#### **SECTION ONE:**

 Chemical Family
 CAS #
 %

 Epoxy Resin
 2806-414-4
 <40%</td>

 Aluminum Powder
 7429-90-5
 <50%</td>

The Remaining Components Are Proprietary

#### **SECTION 2: COMPOSITION INFORMATION**

Appearance Odor: Viscous black liquid.

Melting Or Freezing Point:

Boiling Point:

Vapor Pressure (mm Hg):

Vapor Density (Air=1):

Solubility In Water:

Negligible.

Negligible.

Specific Gravity (Water=1): 1.16. Evaporation Rate (Butyl Acetate=1): <1.

All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

#### **SECTION 3: FIRE AND EXPLOSION HAZARD DATA**

Flash Point: >295°F.
Auto Ignition Temp: N/A.
Lower Explosion Limit (%): N/A.
Upper Explosion Limit (%): N/A.

Extinguishing Media: Foam, C02, Dry. Chemical: Water Spray.

#### **SECTION 4: HEALTH HAZARD DATA**

**Effects Of Overexposure:** 

*Inhalation:* Mist or vapor can irritate the nose and throat.

Eye Contact: Substantially irritating to eyes.

Skin Contact: Substance is moderately irritating and can cause superficial burns after

prolonged contact. Not absorbed in toxic amounts

Ingestion: Harmful if swallowed.

**Delayed Effects:** Prolonged or repeated exposure can cause allergic reaction.

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#### **SECTION 5: EMERGENCY AND FIRST AID PROCEDURES**

*Inhalation:* Move subject to fresh air. Give artificial respiration if breathing has stopped.

**Eye And Skin Contact:** Flush eyes with a large amount of water for at least 15 minutes. Get prompt medical attention. Wash skin thoroughly with soap and water. Remove and wash clothing before reuse.

Ingestion: If swallowed dilute by giving 2 glasses of water to drink. See a physician.

Never give anything by mouth to an unconscious person.

#### **SECTION 6: REACTIVITY INFORMATION**

Stability: Stable

Hazardous Polymerization: Will Not Occur

#### SECTION 7: SPILL OR LEAK PROCEDURES

Dike and absorb spill on inert material (sand, earth, etc.). Transfer diking material to containers for disposal. Wear protective clothing. Use breathing apparatus (MSHA/NIOSH-approved, pressure-demand, self-contained) or air mask for large spills in confined area. Wash clothing before reuse. Destroy clothing that cannot be decontaminated (i.e. Shoes).

**Waste Disposal Methods:** Incinerate liquid in approved equipment. Landfill or incinerate contaminated diking material in accordance with local, state and federal regulations.

#### SECTION 8: SPECIAL PROTECTION INFORMATION

**Ventilation Type:** Normal room ventilation.

**Respiratory Protection:** None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH-approved or equivalent) suitable for concentrations and types of air contaminants encountered.

**Protective Gloves:** Impervious.

**Eye Protection:** Chemical splash goggles(ANSI Z-871 or approved equivalent).

Other Protective Equipment: Evewash facility.

#### **SECTION 9: SPECIAL PRECAUTIONS**

Store away from excessive heat (e.g., steam-pipes, radiators, from sources of ignition, and from reactive materials). Do not store near food or feed. Corrosive to copper and brass on long storage.

Corrosive Material: Avoid all eye and skin contact.

**Misc Info:** The use of this and auxiliary materials should be confined to designated work areas. Emptied containers may still contain hazardous residues.

**Note To Physician:** Allergic dermatitis or respiratory response in susceptible individuals may be delayed even weeks or months after frequent and/or prolonged contact. Acute effects can include mucosa damage, severe laryngeal edema, and shock associated with corrosive agents. Possible mucosa damage may contraindicate the use of gastric lavage.

DATE PREPARED: 11/01/85 DATE REVISED: 02/23/06

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HIMS RATING Health = 2 Fire = 1 Reactivity = 1 HAZARD RATING: 0 = Insignificant 1 = Non-Toxic, Slight 2 = Moderate 3 = High 4 = Extreme

#### **DURALCO 7035**

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

#### **SECTION ONE:**

Chemical Name And Synonyms: N/A Mixture\*

Formula: N/A

Chemical Family: Amine Complex.

#### **SECTION 2: PHYSICAL PROPERTY INFORMATION**

**Boiling Point:** N/A **Vapor Density (Air=1):** >1

Solubility In Water:

% Volatile (By Weight):

Melting Or Freezing Point:

Vapor Pressure (mm Hg):

Specific Gravity (Water=1):

Negligible

Negligible

N/A

1.2 - 1.60

Evaporation Rate (Butyl Acetate=1): <1

**Appearance/Odor:**Black / /Amine odor

All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

#### SECTION 3: FIRE AND EXPLOSION HAZARD DATA

Flash Point: >200°F
Auto Ignition Temp: N/A
Lower Explosion Limit (%): N/A
Upper Explosion Limit (%): N/A

Extinguishing Media: Foam, C02, Dry Chemical: Water Spray

#### **SECTION 4: HEALTH HAZARD DATA**

#### **Effects Of Overexposure:**

Inhalation: Mist/Vapor can irritate the nose and throat. LD50 = 9.8 Mg/L ALC

Eye Contact: Substantially irritating to eyes.

Skin Contact: Substance is moderately irritating and can cause superficial burns after

prolonged contact. LD50 = 7500 Mg/Kg ALD

Ingestion: Harmful if swallowed. LD50 = > 2500 Mg/Kg ALD

**Delayed Effects:** Prolonged or repeated exposure can cause allergic reaction.

#### DATE PREPARED: 11/01/85 DATE REVISED: 02/23/06

#### **SECTION 5: EMERGENCY AND FIRST AID PROCEDURES**

**Inhalation:** Move subject to fresh air. Give artificial respiration if breathing has stopped. **Eye And Skin Contact:** Flush eyes with a large amount of water for at least 15 minutes. Get prompt medical attention. Wash skin thoroughly with soap and water. Remove and wash clothing before reuse.

*Ingestion:* If swallowed dilute by giving 2 glasses of water to drink. See a physician. Never give anything by mouth to an unconscious person.

#### **SECTION 6: REACTIVITY INFORMATION**

Stability: Stable

Hazardous Polymerization: Will not occur

#### **SECTION 7: SPILL OR LEAK PROCEDURES**

Dike and absorb spill on inert material (sand, earth, etc.). Transfer diking material to containers for disposal. Wear protective clothing. Use breathing apparatus (MSHA/NIOSH approved, pressure-demand, self-contained) or air mask for large spills in confined area. Wash clothing before reuse. Destroy clothing that cannot be decontaminated (i.e. Shoes).

**Waste Disposal Methods:** Incinerate liquid in approved equipment. Landfill or incinerate contaminated diking material in accordance with local, state and federal regulations.

#### **SECTION 8: SPECIAL PROTECTION INFORMATION**

**Ventilation Type:** Normal room ventilation.

**Respiratory Protection:** None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH approved or equivalent) suitable for concentrations and types of air contaminants encountered.

Protective Gloves: Impervious.

Eye Protection: Chemical splash goggles (ANSI Z-871 or approved equivalent).

Other Protective Equipment: Eyewash facility.

#### **SECTION 9: SPECIAL PRECAUTIONS**

Store away from excessive heat (e.g., steam-pipes, radiators, from sources of ignition, and from reactive materials). Do not store near food or feed. Avoid all eye and skin contact.

*Misc Info:* The use of this and auxiliary materials should be confined to designated work areas. Emptied containers may still contain hazardous residues.

**Note To Physician:** Allergic dermatitis or respiratory response in susceptible individuals may be delayed even weeks or months after frequent and/or prolonged contact. Acute effects can include mucosa damage, severe laryngeal edema, and shock associated with corrosive agents. Possible mucosa damage may contraindicate the use of gastric lavage.

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HIMS RATING Health = 2 Fire = 1 Reactivity = 0 HAZARD RATING: 0 = Insignificant 1 = Non-Toxic, Slight 2 = Moderate 3 = High 4 = Extreme

<sup>\*</sup>Note all materials contained are listed on the EPA TSCA Inventory list.

### MATERIAL SAFETY DATA SHEET COTRONICS EPOXY RESIN DURABOND 7036

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

#### SECTION ONE:

Chemical Name and Synonyms: N/A Mixture

Chemical Formula: N/A

Chemical Family: Proprietary Modified Epoxy Resin

\*Please note all materials contained are listed on the EPA TOSCA Inventory list.

This product is compliant with the RoHS Directive.

#### **SECTION 2: COMPOSITION INFORMATION**

Appearance & Odor: Amber transparent liquid to viscous light

greyish

Melting Or Freezing Point:N/ABoiling Point:N/AVapor Pressure (mm Hg):N/AVapor Density (Air=1):>1.

Solubility In Water: Negligible. % Volatile (By Weight): Negligible. Specific Gravity (Water=1): 1.16. Evaporation Rate (Butyl Acetate=1): <1.

All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

#### **SECTION 3: FIRE AND EXPLOSION HAZARD DATA**

Flash Point: >295°F
Auto Ignition Temp: N/A
Lower Explosion Limit (%): N/A
Upper Explosion Limit (%): N/A

Extinguishing Media: Foam, C02, Dry Chemical: Water Spray

#### **SECTION 4: HEALTH HAZARD DATA**

#### **Effects Of Overexposure:**

Inhalation: Mist or vapor can irritate the nose and throat.

**Eye Contact:** Substantially irritating to eyes.

Skin Contact: Substance is moderately irritating and can cause superficial burns after

prolonged contact. Not absorbed in toxic amounts.

Ingestion: Harmful if swallowed.

**Delayed Effects:** Prolonged or repeated exposure can cause allergic reaction.

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#### **SECTION 5: EMERGENCY AND FIRST AID PROCEDURES**

**Inhalation:** Move subject to fresh air. Give artificial respiration if breathing has stopped. **Eye And Skin Contact:** Flush eyes with a large amount of water for at least 15 minutes. Get prompt medical attention. Wash skin thoroughly with soap and water. Remove and wash clothing before reuse.

*Ingestion:* If swallowed dilute by giving 2 glasses of water to drink. See a physician. Never give anything by mouth to an unconscious person.

#### SECTION 6: REACTIVITY INFORMATION

Stability: Stable
Hazardous Polymerization: Will not occur.

#### **SECTION 7: SPILL OR LEAK PROCEDURES**

Dike and absorb spill on inert material (sand, earth, etc.). Transfer diking material to containers for disposal. Wear protective clothing. Use breathing apparatus (MSHA/NIOSH-approved, pressure-demand, self-contained) or air mask for large spills in confined area. Wash clothing before reuse. Destroy clothing that cannot be decontaminated (i.e. Shoes).

**Waste Disposal Methods:** Incinerate liquid in approved equipment. Landfill or incinerate contaminated diking material in accordance with local, state and federal regulations.

#### SECTION 8: SPECIAL PROTECTION INFORMATION

**Ventilation Type:** Normal room ventilation.

**Respiratory Protection:** None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH-approved or equivalent) suitable for concentrations and types of air contaminants encountered.

Protective Gloves: Impervious.

Eye Protection: Chemical splash goggles(ANSI Z-871 or approved equivalent).

Other Protective Equipment: Eyewash facility.

#### **SECTION 9: SPECIAL PRECAUTIONS**

**Storage:** Store away from excessive heat (e.g., steam-pipes, radiators, from sources of ignition, and from reactive materials). Do not store near food or feed. Corrosive to copper and brass on long storage.

Corrosive Material: Avoid all eye and skin contact.

**Misc Info:** The use of this and auxiliary materials should be confined to designated work areas. Emptied containers may still contain hazardous residues.

**Note To Physician:** Allergic dermatitis or respiratory response in susceptible individuals may be delayed even weeks or months after frequent and/or prolonged contact. Acute effects can include mucosa damage, severe laryngeal edema, and shock associated with corrosive agents. Possible mucosa damage may contraindicate the use of gastric layage

DATE PREPARED: 11/01/85 DATE REVISED: 02/23/06

HIMS RATING Health = 2 Fire = 1 Reactivity = 1 HAZARD RATING: 0 = Insignificant 1 = Non-Toxic, Slight 2 = Moderate 3 = High 4 = Extreme

#### **DURABOND 7036 HARDENER**

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

#### **SECTION ONE:**

Chemical Name And Synonyms: N/A Mixture\*

Formula: N/A

Chemical Family: Amine Complex.

#### **SECTION 2: PHYSICAL PROPERTY INFORMATION**

Boiling Point: N/A Vapor Density (Air=1): >1

Solubility In Water:Negligible% Volatile (By Weight):NegligibleMelting Or Freezing Point:N/AVapor Pressure (mm Hg):N/ASpecific Gravity (Water=1):0.93 - 1.30

Evaporation Rate (Butyl Acetate=1): <1

Appearance/Odor: yellow, amber or red liquid/Amine odor

All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

#### **SECTION 3: FIRE AND EXPLOSION HAZARD DATA**

Flash Point: >200°F
Auto Ignition Temp: N/A
Lower Explosion Limit (%): N/A
Upper Explosion Limit (%): N/A

Extinguishing Media: Foam, C02, Dry Chemical: Water Spray

#### **SECTION 4: HEALTH HAZARD DATA**

Effects Of Overexposure:

*Inhalation:* Mist/Vapor can irritate the nose and throat.

*Eye Contact:* Substantially irritating to eyes.

Skin Contact: Substance is moderately irritating and can cause superficial burns after

prolonged contact.

*Ingestion:* Harmful if swallowed.

*Delayed Effects:* Prolonged or repeated exposure can cause allergic reaction.

### DATE PREPARED: 11/01/85 DATE REVISED: 02/23/06

#### SECTION 5: EMERGENCY AND FIRST AID PROCEDURES

**Inhalation:** Move subject to fresh air. Give artificial respiration if breathing has stopped. **Eye And Skin Contact:** Flush eyes with a large amount of water for at least 15 minutes. Get prompt medical attention. Wash skin thoroughly with soap and water. Remove and wash clothing before reuse.

*Ingestion:* If swallowed dilute by giving 2 glasses of water to drink. See a physician. Never give anything by mouth to an unconscious person.

#### **SECTION 6: REACTIVITY INFORMATION**

Stability: Stable

Hazardous Polymerization: Will not occur

#### **SECTION 7: SPILL OR LEAK PROCEDURES**

Dike and absorb spill on inert material (sand, earth, etc.). Transfer diking material to containers for disposal. Wear protective clothing. Use breathing apparatus (MSHA/NIOSH approved, pressure-demand, self-contained) or air mask for large spills in confined area. Wash clothing before reuse. Destroy clothing that cannot be decontaminated (i.e. Shoes).

**Waste Disposal Methods:** Incinerate liquid in approved equipment. Landfill or incinerate contaminated diking material in accordance with local, state and federal regulations.

#### SECTION 8: SPECIAL PROTECTION INFORMATION

Ventilation Type: Normal room ventilation.

**Respiratory Protection:** None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH approved or equivalent) suitable for concentrations and types of air contaminants encountered.

Protective Gloves: Impervious.

Eye Protection: Chemical splash goggles (ANSI Z-871 or approved equivalent).

Other Protective Equipment: Eyewash facility.

#### **SECTION 9: SPECIAL PRECAUTIONS**

Store away from excessive heat (e.g., steam-pipes, radiators, from sources of ignition, and from reactive materials). Do not store near food or feed. Avoid all eye and skin contact.

*Misc Info:* The use of this and auxiliary materials should be confined to designated work areas. Emptied containers may still contain hazardous residues.

**Note To Physician:** Allergic dermatitis or respiratory response in susceptible individuals may be delayed even weeks or months after frequent and/or prolonged contact. Acute effects can include mucosa damage, severe laryngeal edema, and shock associated with corrosive agents. Possible mucosa damage may contraindicate the use of gastric lavage.

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HIMS RATING Health = 2 Fire = 1 Reactivity = 0 HAZARD RATING: 0 = Insignificant 1 = Non-Toxic, Slight 2 = Moderate 3 = High 4 = Extreme

<sup>\*</sup>Note all materials contained are listed on the EPA TSCA Inventory list.

#### **DURALCO 7038**

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

**SECTION 1: PRODUCT IDENTIFICATION** 

Chemical Name And Synonyms: N/A Mixture

Chemical Formula: N/A

Chemical Family: Proprietary Modified Epoxy Resin.\*

**SECTION 2: COMPOSITION INFORMATION** 

Material: Proprietary Modified Epoxy Resin

All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

**SECTION 3: PHYSICAL PROPERTY INFORMATION** 

**Boiling Point:** > 400°F

Vapor Density (Air=1): >1

Solubility In Water:

% Volatile (By Weight):

Specific Gravity (Water=1):

Vapor Pressure (mm Hg):

Negligible

0.9 - 1.2

N/A

Melting Or Freezing Point: < 40°F

Evaporation Rate (Butyl Acetate=1): <1

Appearance/Odor: Tan/ Beige /Slight Odor

SECTION 4: FIRE AND EXPLOSION HAZARD DATA

Flash Point: > 295°F
Auto Ignition Temp: N/A

Lower Explosion Limit (%): N/A
Upper Explosion Limit (%): N/A

Extinguishing Media: Foam, C02, Dry Chemical: Water Spray

**SECTION 5: HEALTH HAZARD DATA** 

**Effects Of Overexposure:** 

Inhalation: Mist or vapor can irritate the nose and throat.

Eye Contact: Substantially irritating to eyes.

Skin Contact: Substance is moderately irritating and can cause superficial burns after

prolonged contact. Not absorbed in toxic amounts

Ingestion: Harmful if swallowed.

**Delayed Effects:** Prolonged or repeated exposure can cause allergic reaction.

#### **SECTION 6: EMERGENCY AND FIRST AID PROCEDURES**

**Inhalation:** Move subject to fresh air. Give artificial respiration if breathing has stopped. **Eye And Skin Contact:** Flush eyes with a large amount of water for at least 15 minutes. Get prompt medical attention. Wash skin thoroughly with soap and water. Remove and wash clothing before reuse.

*Ingestion:* If swallowed dilute by giving 2 glasses of water to drink. See a physician. Never give anything by mouth to an unconscious person.

**SECTION 7: REACTIVITY INFORMATION** 

**Stability:** Stable **Hazardous Polymerization:** Will Not Occur

**SECTION 8: SPILL OR LEAK PROCEDURES** 

Dike and absorb spill on inert material (sand, earth, etc.). Transfer diking material to containers for disposal. Wear protective clothing. Use breathing apparatus (MSHA/NIOSH approved, pressure-demand, self-contained) or air mask for large spills in confined area. Wash clothing before reuse. Destroy clothing that cannot be decontaminated (i.e. Shoes).

**Waste Disposal Methods:** Landfill or incinerate contaminated in accordance with local, state and federal regulations. Dispose of material in approved equipment.

#### **SECTION 9: SPECIAL PROTECTION INFORMATION**

Ventilation Type: Normal room ventilation.

**Respiratory Protection:** None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH approved or equivalent) suitable for concentrations and types of air contaminants encountered.

**Protective Gloves:** Impervious.

Eye Protection: Chemical splash goggles (ANSI Z-871 or approved equivalent).

Other Protective Equipment: Eyewash facility.

#### SECTION 10: SPECIAL PRECAUTIONS

Store away from excessive heat (e.g., steam-pipes, radiators, from sources of ignition, and from reactive materials). Do not store near food or feed. Avoid all eye and skin contact.

**Note To Physician:** Allergic dermatitis or respiratory response in susceptible individuals may be delayed even weeks or months after frequent and/or prolonged contact. Acute effects can include mucosa damage, severe laryngeal edema, and shock associated with corrosive agents. Possible mucosa damage may contraindicate the use of gastric lavage. (This product is not approved by FDA for internal use).

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#### **DURALCO 7038**

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

#### **SECTION ONE**

Chemical Name And Synonyms: N/A Mixture\*

Formula: N/A

Chemical Family: Amine Complex

#### SECTION 2: PHYSICAL PROPERTY INFORMATION

Boiling Point: N/A Vapor Density (Air=1): >1

Solubility In Water:Negligible% Volatile (By Weight):NegligibleMelting Or Freezing Point:N/AVapor Pressure (mm Hg):N/ASpecific Gravity (Water=1):0.9 - 1.1

Evaporation Rate (Butyl Acetate=1): <1

Appearance/Odor:Tan Beigeliquid/Amine odorAll materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

#### SECTION 3: FIRE AND EXPLOSION HAZARD DATA

Flash Point: >200°F
Auto Ignition Temp: N/A
Lower Explosion Limit (%): N/A
Upper Explosion Limit (%): N/A

Extinguishing Media: Foam, C02, Dry Chemical: Water Spray

#### **SECTION 4: HEALTH HAZARD DATA**

Effects Of Overexposure:

*Inhalation:* Mist/Vapor can irritate the nose and throat.

*Eye Contact:* Substantially irritating to eyes.

Skin Contact: Substance is moderately irritating and can cause superficial burns after

prolonged contact.

*Ingestion:* Harmful if swallowed.

Delayed Effects: Prolonged or repeated exposure can cause allergic reaction.

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#### **SECTION 5: EMERGENCY AND FIRST AID PROCEDURES**

**Inhalation:** Move subject to fresh air. Give artificial respiration if breathing has stopped. **Eye And Skin Contact:** Flush eyes with a large amount of water for at least 15 minutes. Get prompt medical attention. Wash skin thoroughly with soap and water.

Remove and wash clothing before reuse.

Ingestion: If swallowed dilute by giving 2 glasses of water to drink. See a physician.

Never give anything by mouth to an unconscious person.

#### **SECTION 6: REACTIVITY INFORMATION**

Stability: Stable

Hazardous Polymerization: Will not occur

#### **SECTION 7: SPILL OR LEAK PROCEDURES**

Dike and absorb spill on inert material (sand, earth, etc.). Transfer diking material to containers for disposal. Wear protective clothing. Use breathing apparatus (MSHA/NIOSH approved, pressure-demand, self-contained) or air mask for large spills in confined area. Wash clothing before reuse. Destroy clothing that cannot be decontaminated (i.e. Shoes).

**Waste Disposal Methods:** Landfill or incinerate contaminated in accordance with local, state and federal regulations. Dispose of material in approved equipment.

#### **SECTION 8: SPECIAL PROTECTION INFORMATION**

**Ventilation Type:** Normal room ventilation.

**Respiratory Protection:** None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH approved or equivalent) suitable for concentrations and types of air contaminants encountered.

Protective Gloves: Impervious.

Eye Protection: Chemical splash goggles (ANSI Z-871 or approved equivalent).

Other Protective Equipment: Eyewash facility.

#### **SECTION 9: SPECIAL PRECAUTIONS**

Store away from excessive heat (e.g., steam-pipes, radiators, from sources of ignition, and from reactive materials). Do not store near food or feed. Avoid all eye and skin contact.

*Misc Info:* The use of this and auxiliary materials should be confined to designated work areas. Emptied containers may still contain hazardous residues.

**Note To Physician:** Allergic dermatitis or respiratory response in susceptible individuals may be delayed even weeks or months after frequent and/or prolonged contact. Acute effects can include mucosa damage, severe laryngeal edema, and shock associated with corrosive agents. Possible mucosa damage may contraindicate the use of gastric lavage.

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#### Bond- It Fast Set 7039

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

SECTION ONE:

Chemical Name and Synonyms: N/A Mixture

**Chemical Formula:** 

**Chemical Family:** Proprietary Modified Epoxy Resin

**SECTION 2: COMPOSITION INFORMATION** 

Appearance & Odor: Amber transparent liquid to viscous blueish

grey liquid.

Melting Or Freezing Point: N/A **Boiling Point:** N/A Vapor Pressure (mm Hg): N/A Vapor Density (Air=1): >1.

Solubility In Water: Negligible. Negligible. % Volatile (By Weight): Specific Gravity (Water=1): 1.16.

Evaporation Rate (Butyl Acetate=1): <1.

All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

**SECTION 3: FIRE AND EXPLOSION HAZARD DATA** 

>295°F Flash Point: Auto Ignition Temp: N/A Lower Explosion Limit (%): N/A Upper Explosion Limit (%): N/A

Extinguishing Media: Foam, C02, Dry Chemical: Water Spray

**SECTION 4: HEALTH HAZARD DATA** 

**Effects Of Overexposure:** 

**Inhalation:** Mist or vapor can irritate the nose and throat.

**Eve Contact:** Substantially irritating to eyes.

Skin Contact: Substance is moderately irritating and can cause superficial burns after

prolonged contact. Not absorbed in toxic amounts.

Ingestion: Harmful if swallowed.

**Delayed Effects:** Prolonged or repeated exposure can cause allergic reaction.

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#### **SECTION 5: EMERGENCY AND FIRST AID PROCEDURES**

*Inhalation:* Move subject to fresh air. Give artificial respiration if breathing has stopped. **Eve And Skin Contact:** Flush eves with a large amount of water for at least 15 minutes. Get prompt medical attention. Wash skin thoroughly with soap and water. Remove and wash clothing before reuse.

Ingestion: If swallowed dilute by giving 2 glasses of water to drink. See a physician. Never give anything by mouth to an unconscious person.

SECTION 6: REACTIVITY INFORMATION

Stability: Stable

Hazardous Polymerization: Will not occur.

SECTION 7: SPILL OR LEAK PROCEDURES

Dike and absorb spill on inert material (sand, earth, etc.). Transfer diking material to containers for disposal. Wear protective clothing. Use breathing apparatus (MSHA/NIOSH-approved, pressure-demand, self-contained) or air mask for large spills in confined area. Wash clothing before reuse. Destroy clothing that cannot be decontaminated (i.e. Shoes).

Waste Disposal Methods: Incinerate liquid in approved equipment. Landfill or incinerate contaminated diking material in accordance with local, state and federal regulations.

#### **SECTION 8: SPECIAL PROTECTION INFORMATION**

Ventilation Type: Normal room ventilation.

**Respiratory Protection:** None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH-approved or equivalent ) suitable for concentrations and types of air contaminants encountered.

Protective Gloves: Impervious.

Eye Protection: Chemical splash goggles(ANSI Z-871 or approved equivalent).

Other Protective Equipment: Eyewash facility.

#### **SECTION 9: SPECIAL PRECAUTIONS**

Storage: Store away from excessive heat (e.g., steam-pipes, radiators, from sources of ignition, and from reactive materials). Do not store near food or feed.

Corrosive Material: Avoid all eye and skin contact.

Misc Info: The use of this and auxiliary materials should be confined to designated

work areas. Emptied containers may still contain hazardous residues.

Note To Physician: Allergic dermatitis or respiratory response in susceptible individuals may be delayed even weeks or months after frequent and/or prolonged contact. Acute effects can include mucosa damage, severe laryngeal edema, and shock associated with corrosive agents. Possible mucosa damage may contraindicate the use of gastric lavage.

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### MATERIAL SAFETY DATA SHEET COTRONICS EPOXY HARDENERS Bond- It Fast Set 7039

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

#### **SECTION ONE:**

Chemical Name And Synonyms: N/A Mixture\*

Formula: N/A

**Chemical Family:** Amine Complex.

#### **SECTION 2: PHYSICAL PROPERTY INFORMATION**

Boiling Point: N/A Vapor Density (Air=1): >1

Solubility In Water:Negligible% Volatile (By Weight):NegligibleMelting Or Freezing Point:N/AVapor Pressure (mm Hg):N/ASpecific Gravity (Water=1):0.93 - 1.30

Evaporation Rate (Butyl Acetate=1): <1

Appearance/Odor: yellow, amber or red liquid/Amine odor

All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

#### SECTION 3: FIRE AND EXPLOSION HAZARD DATA

Flash Point: >200°F
Auto Ignition Temp: N/A
Lower Explosion Limit (%): N/A
Upper Explosion Limit (%): N/A

Extinguishing Media: Foam, C02, Dry Chemical: Water Spray

#### **SECTION 4: HEALTH HAZARD DATA**

Effects Of Overexposure:

*Inhalation:* Mist/Vapor can irritate the nose and throat.

Eye Contact: Substantially irritating to eyes.

Skin Contact: Substance is moderately irritating and can cause superficial burns after

prolonged contact.

*Ingestion:* Harmful if swallowed.

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*Delayed Effects:* Prolonged or repeated exposure can cause allergic reaction.

#### SECTION 5: EMERGENCY AND FIRST AID PROCEDURES

*Inhalation:* Move subject to fresh air. Give artificial respiration if breathing has stopped. *Eye And Skin Contact:* Flush eyes with a large amount of water for at least 15 minutes. Get prompt medical attention. Wash skin thoroughly with soap and water. Remove and wash clothing before reuse.

*Ingestion:* If swallowed dilute by giving 2 glasses of water to drink. See a physician. Never give anything by mouth to an unconscious person.

#### **SECTION 6: REACTIVITY INFORMATION**

Stability: Stable

Hazardous Polymerization: Will not occur

#### **SECTION 7: SPILL OR LEAK PROCEDURES**

Dike and absorb spill on inert material (sand, earth, etc.). Transfer diking material to containers for disposal. Wear protective clothing. Use breathing apparatus (MSHA/NIOSH approved, pressure-demand, self-contained) or air mask for large spills in confined area. Wash clothing before reuse. Destroy clothing that cannot be decontaminated (i.e. Shoes).

**Waste Disposal Methods:** Incinerate liquid in approved equipment. Landfill or incinerate contaminated diking material in accordance with local, state and federal regulations.

#### **SECTION 8: SPECIAL PROTECTION INFORMATION**

Ventilation Type: Normal room ventilation.

**Respiratory Protection:** None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH approved or equivalent) suitable for concentrations and types of air contaminants encountered.

Protective Gloves: Impervious.

Eve Protection: Chemical splash goggles (ANSI Z-871 or approved equivalent).

Other Protective Equipment: Eyewash facility.

#### **SECTION 9: SPECIAL PRECAUTIONS**

Store away from excessive heat (e.g., steam-pipes, radiators, from sources of ignition, and from reactive materials). Do not store near food or feed. Avoid all eye and skin contact.

*Misc Info:* The use of this and auxiliary materials should be confined to designated work areas. Emptied containers may still contain hazardous residues.

**Note To Physician:** Allergic dermatitis or respiratory response in susceptible individuals may be delayed even weeks or months after frequent and/or prolonged contact. Acute effects can include mucosa damage, severe laryngeal edema, and shock associated with corrosive agents. Possible mucosa damage may contraindicate the use of gastric lavage.

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<sup>\*</sup>Note all materials contained are listed on the EPA TSCA Inventory list.

Bond- It 7040

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

#### **SECTION ONE:**

**Chemical Name and Synonyms:** N/A Mixture

Chemical Formula: N/A

Chemical Family: Proprietary Modified Epoxy Resin

\*Please note all materials contained are listed on the EPA TSCA Inventory list.

#### **SECTION 2: COMPOSITION INFORMATION**

Appearance & Odor: Light beige viscous liquid.

Melting Or Freezing Point:<40°F</td>Boiling Point:>300°FVapor Pressure (mm Hg):No data.Vapor Density (Air=1):>1.Solubility In Water:Negligible.% Volatile (By Weight):Negligible.

Specific Gravity (Water=1): 1.16. Evaporation Rate (Butyl Acetate=1): <1.

All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

#### SECTION 3: FIRE AND EXPLOSION HAZARD DATA

Flash Point: >295°F
Auto Ignition Temp: N/A
Lower Explosion Limit (%): N/A
Upper Explosion Limit (%): N/A

Extinguishing Media: Foam, C02, Dry Chemical: Water Spray

#### **SECTION 4: HEALTH HAZARD DATA**

#### Effects Of Overexposure:

**Inhalation:** Mist or vapor can irritate the nose and throat.

Eye Contact: Substantially irritating to eyes.

Skin Contact: Substance is moderately irritating and can cause superficial burns after

prolonged contact. Not absorbed in toxic amounts.

Ingestion: Harmful if swallowed.

**Delayed Effects:** Prolonged or repeated exposure can cause allergic reaction.

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#### **SECTION 5: EMERGENCY AND FIRST AID PROCEDURES**

**Inhalation:** Move subject to fresh air. Give artificial respiration if breathing has stopped. **Eye And Skin Contact:** Flush eyes with a large amount of water for at least 15 minutes. Get prompt medical attention. Wash skin thoroughly with soap and water.

Remove and wash clothing before reuse.

*Ingestion:* If swallowed dilute by giving 2 glasses of water to drink. See a physician.

Never give anything by mouth to an unconscious person.

#### **SECTION 6: REACTIVITY INFORMATION**

Stability: Stable

Hazardous Polymerization: Will not occur.

#### SECTION 7: SPILL OR LEAK PROCEDURES

Dike and absorb spill on inert material (sand, earth, etc.). Transfer diking material to containers for disposal. Wear protective clothing. Use breathing apparatus (MSHA/NIOSH-approved, pressure-demand, self-contained) or air mask for large spills in confined area. Wash clothing before reuse. Destroy clothing that cannot be decontaminated (i.e. Shoes).

**Waste Disposal Methods:** Incinerate liquid in approved equipment. Landfill or incinerate contaminated diking material in accordance with local, state and federal regulations.

#### SECTION 8: SPECIAL PROTECTION INFORMATION

Ventilation Type: Normal room ventilation.

**Respiratory Protection:** None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH-approved or equivalent) suitable for concentrations and types of air contaminants encountered.

**Protective Gloves:** Impervious.

Eye Protection: Chemical splash goggles(ANSI Z-871 or approved equivalent).

Other Protective Equipment: Eyewash facility.

#### **SECTION 9: SPECIAL PRECAUTIONS**

**Storage:** Store away from excessive heat (e.g., steam-pipes, radiators, from sources of ignition, and from reactive materials). Do not store near food or feed. Corrosive to copper and brass on long storage.

Corrosive Material: Avoid all eye and skin contact.

*Misc Info:* The use of this and auxiliary materials should be confined to designated work areas. Emptied containers may still contain hazardous residues.

**Note To Physician:** Allergic dermatitis or respiratory response in susceptible individuals may be delayed even weeks or months after frequent and/or prolonged contact. Acute effects can include mucosa damage, severe laryngeal edema, and shock associated with corrosive agents. Possible mucosa damage may contraindicate the use of gastric lavage.

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HIMS RATING Health = 2 Fire = 1 Reactivity = 1 HAZARD RATING: 0 = Insignificant 1 = Non-Toxic, Slight 2 = Moderate 3 = High 4 = Extreme

#### Bond- It 7040 Hardener

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

#### **SECTION ONE:**

Chemical Name And Synonyms: N/A Mixture

Formula: N/A

Chemical Family: Amine Complex

All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

#### **SECTION 2: PHYSICAL PROPERTY INFORMATION**

Boiling Point: N/A Vapor Density (Air=1): >1

Solubility In Water:Negligible% Volatile (By Weight):NegligibleMelting Or Freezing Point:N/AVapor Pressure (mm Hg):N/ASpecific Gravity (Water=1):0.93 - 1.30

Evaporation Rate (Butyl Acetate=1): <1

Appearance/Odor: Off white opaque amber liquid/Amine odor

#### **SECTION 3: FIRE AND EXPLOSION HAZARD DATA**

Flash Point: >200°F
Auto Ignition Temp: N/A
Lower Explosion Limit (%): N/A
Upper Explosion Limit (%): N/A

Extinguishing Media: Foam, C02, Dry Chemical: Water Spray

#### **SECTION 4: HEALTH HAZARD DATA**

Effects Of Overexposure:

*Inhalation:* Mist/Vapor can irritate the nose and throat.

HIMS RATING Health = 2 Fire = 0 Reactivity = 0

*Eye Contact:* Substantially irritating to eyes.

Skin Contact: Substance is moderately irritating and can cause superficial burns after

prolonged contact.

*Ingestion:* Harmful if swallowed.

Delayed Effects: Prolonged or repeated exposure can cause allergic reaction.

#### SECTION 5: EMERGENCY AND FIRST AID PROCEDURES

**Inhalation:** Move subject to fresh air. Give artificial respiration if breathing has stopped. **Eye And Skin Contact:** Flush eyes with a large amount of water for at least 15 minutes. Get prompt medical attention. Wash skin thoroughly with soap and water. Remove and wash clothing before reuse.

*Ingestion:* If swallowed dilute by giving 2 glasses of water to drink. See a physician. Never give anything by mouth to an unconscious person.

#### **SECTION 6: REACTIVITY INFORMATION**

Stability: Stable

Hazardous Polymerization: Will not occur

#### **SECTION 7: SPILL OR LEAK PROCEDURES**

Dike and absorb spill on inert material (sand, earth, etc.). Transfer diking material to containers for disposal. Wear protective clothing. Use breathing apparatus (MSHA/NIOSH approved, pressure-demand, self-contained) or air mask for large spills in confined area. Wash clothing before reuse. Destroy clothing that cannot be decontaminated (i.e. Shoes).

**Waste Disposal Methods:** Incinerate liquid in approved equipment. Landfill or incinerate contaminated diking material in accordance with local, state and federal regulations.

#### **SECTION 8: SPECIAL PROTECTION INFORMATION**

**Ventilation Type:** Normal room ventilation.

**Respiratory Protection:** None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH approved or equivalent) suitable for concentrations and types of air contaminants encountered.

Protective Gloves: Impervious.

HAZARD RATING: 0 = Insignificant 1 = Non-Toxic, Slight 2 = Moderate 3 = High 4 = Extreme

Eve Protection: Chemical splash goggles (ANSI Z-871 or approved equivalent).

Other Protective Equipment: Eyewash facility.

#### **SECTION 9: SPECIAL PRECAUTIONS**

Store away from excessive heat (e.g., steam-pipes, radiators, from sources of ignition, and from reactive materials). Do not store near food or feed. Avoid all eye and skin contact.

*Misc Info:* The use of this and auxiliary materials should be confined to designated work areas. Emptied containers may still contain hazardous residues.

**Note To Physician:** Allergic dermatitis or respiratory response in susceptible individuals may be delayed even weeks or months after frequent and/or prolonged contact. Acute effects can include mucosa damage, severe laryngeal edema, and shock associated with corrosive agents. Possible mucosa damage may contraindicate the use of gastric lavage.

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#### **BOND-IT 7050 Resin**

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

**SECTION 1: PRODUCT IDENTIFICATION** 

**Chemical Name And Synonyms:** N/A Mixture

Chemical Formula: N/A

Chemical Family: Proprietary Modified Epoxy Resin.\*

**SECTION 2: COMPOSITION INFORMATION** 

Material: Proprietary Modified Epoxy Resin

All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

**SECTION 3: PHYSICAL PROPERTY INFORMATION** 

**Boiling Point:** > 400°F

Vapor Density (Air=1):>1Solubility In Water:Negligible% Volatile (By Weight):NegligibleSpecific Gravity (Water=1):1.8 - 2.1

Vapor Pressure (mm Hg):

Melting Or Freezing Point: < 40°F

Evaporation Rate (Butyl Acetate=1): <1

Appearance/Odor: Viscous Black Liquid/Slight Odor

SECTION 4: FIRE AND EXPLOSION HAZARD DATA

Flash Point: > 295°F

Auto Ignition Temp: N/A
Lower Explosion Limit (%): N/A
Upper Explosion Limit (%): N/A

Extinguishing Media: Foam, C02, Dry Chemical: Water Spray

**SECTION 5: HEALTH HAZARD DATA** 

**Effects Of Overexposure:** 

Inhalation: Mist or vapor can irritate the nose and throat.

Eye Contact: Substantially irritating to eyes.

Skin Contact: Substance is moderately irritating and can cause superficial burns after

prolonged contact. Not absorbed in toxic amounts

Ingestion: Harmful if swallowed.

**Delayed Effects:** Prolonged or repeated exposure can cause allergic reaction.

#### **SECTION 6: EMERGENCY AND FIRST AID PROCEDURES**

**Inhalation:** Move subject to fresh air. Give artificial respiration if breathing has stopped. **Eye And Skin Contact:** Flush eyes with a large amount of water for at least 15 minutes. Get prompt medical attention. Wash skin thoroughly with soap and water. Remove and wash clothing before reuse.

*Ingestion:* If swallowed dilute by giving 2 glasses of water to drink. See a physician. Never give anything by mouth to an unconscious person.

#### SECTION 7: REACTIVITY INFORMATION

Stability: Stable
Hazardous Polymerization: Will Not Occur

#### **SECTION 8: SPILL OR LEAK PROCEDURES**

Dike and absorb spill on inert material (sand, earth, etc.). Transfer diking material to containers for disposal. Wear protective clothing. Use breathing apparatus (MSHA/NIOSH approved, pressure-demand, self-contained) or air mask for large spills in confined area. Wash clothing before reuse. Destroy clothing that cannot be decontaminated (i.e. Shoes).

**Waste Disposal Methods:** Landfill or incinerate contaminated in accordance with local, state and federal regulations. Dispose of material in approved equipment.

#### **SECTION 9: SPECIAL PROTECTION INFORMATION**

Ventilation Type: Normal room ventilation.

**Respiratory Protection:** None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH approved or equivalent) suitable for concentrations and types of air contaminants encountered.

**Protective Gloves:** Impervious.

Eye Protection: Chemical splash goggles (ANSI Z-871 or approved equivalent).

Other Protective Equipment: Eyewash facility.

#### **SECTION 10: SPECIAL PRECAUTIONS**

Store away from excessive heat (e.g., steam-pipes, radiators, from sources of ignition, and from reactive materials). Do not store near food or feed. Avoid all eye and skin contact.

**Note To Physician:** Allergic dermatitis or respiratory response in susceptible individuals may be delayed even weeks or months after frequent and/or prolonged contact. Acute effects can include mucosa damage, severe laryngeal edema, and shock associated with corrosive agents. Possible mucosa damage may contraindicate the use of gastric lavage. (This product is not approved by FDA for internal use).

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DATE PREPARED: 11/01/85 DATE REVISED: 02/23/06

#### **BOND-IT 7050 Hardener**

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

#### **SECTION ONE**

Chemical Name And Synonyms: N/A Mixture\*

Formula: N/A

Chemical Family: Amine Complex

#### **SECTION 2: PHYSICAL PROPERTY INFORMATION**

Boiling Point: N/A Vapor Density (Air=1): >1

Solubility In Water:Negligible% Volatile (By Weight):NegligibleMelting Or Freezing Point:N/AVapor Pressure (mm Hg):N/A

Specific Gravity (Water=1): 0.93 - 1.30

Evaporation Rate (Butyl Acetate=1): <1

**Appearance/Odor:** Transparent amber to opaque brown

liquid/Amine odor

All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

#### **SECTION 3: FIRE AND EXPLOSION HAZARD DATA**

Flash Point: >200°F
Auto Ignition Temp: N/A
Lower Explosion Limit (%): N/A
Upper Explosion Limit (%): N/A

Extinguishing Media: Foam, C02, Dry Chemical: Water Spray

#### **SECTION 4: HEALTH HAZARD DATA**

**Effects Of Overexposure:** 

*Inhalation:* Mist/Vapor can irritate the nose and throat.

**Eve Contact:** Substantially irritating to eyes.

Skin Contact: Substance is moderately irritating and can cause superficial burns after

prolonged contact.

Ingestion: Harmful if swallowed.

**Delayed Effects:** Prolonged or repeated exposure can cause allergic reaction.

DATE PREPARED: 11/01/85 DATE REVISED: 02/23/06

#### SECTION 5: EMERGENCY AND FIRST AID PROCEDURES

**Inhalation:** Move subject to fresh air. Give artificial respiration if breathing has stopped. **Eye And Skin Contact:** Flush eyes with a large amount of water for at least 15 minutes. Get prompt medical attention. Wash skin thoroughly with soap and water. Remove and wash clothing before reuse.

*Ingestion:* If swallowed dilute by giving 2 glasses of water to drink. See a physician. Never give anything by mouth to an unconscious person.

#### **SECTION 6: REACTIVITY INFORMATION**

Stability: Stable

Hazardous Polymerization: Will not occur

#### **SECTION 7: SPILL OR LEAK PROCEDURES**

Dike and absorb spill on inert material (sand, earth, etc.). Transfer diking material to containers for disposal. Wear protective clothing. Use breathing apparatus (MSHA/NIOSH approved, pressure-demand, self-contained) or air mask for large spills in confined area. Wash clothing before reuse. Destroy clothing that cannot be decontaminated (i.e. Shoes).

**Waste Disposal Methods:** Landfill or incinerate contaminated in accordance with local, state and federal regulations. Dispose of material in approved equipment.

#### **SECTION 8: SPECIAL PROTECTION INFORMATION**

Ventilation Type: Normal room ventilation.

**Respiratory Protection:** None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH approved or equivalent) suitable for concentrations and types of air contaminants encountered.

**Protective Gloves:** Impervious.

Eye Protection: Chemical splash goggles (ANSI Z-871 or approved equivalent).

Other Protective Equipment: Eyewash facility.

#### **SECTION 9: SPECIAL PRECAUTIONS**

Store away from excessive heat (e.g., steam-pipes, radiators, from sources of ignition, and from reactive materials). Do not store near food or feed. Avoid all eye and skin contact.

*Misc Info:* The use of this and auxiliary materials should be confined to designated work areas. Emptied containers may still contain hazardous residues.

**Note To Physician:** Allergic dermatitis or respiratory response in susceptible individuals may be delayed even weeks or months after frequent and/or prolonged contact. Acute effects can include mucosa damage, severe laryngeal edema, and shock associated with corrosive agents. Possible mucosa damage may contraindicate the use of gastric lavage.

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HIMS RATING Health = 2 Fire = 1 Reactivity = 0 HAZARD RATING: 0 = Insignificant 1 = Non-Toxic, Slight 2 = Moderate 3 = High 4 = Extreme

#### Bond-IT 7056 Resin

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

**SECTION 1: PRODUCT IDENTIFICATION** 

Chemical Name And Synonyms: N/A Mixture

Chemical Formula: N/A

Chemical Family: Proprietary Modified Epoxy Resin.\*

**SECTION 2: COMPOSITION INFORMATION** 

*Material:* Proprietary Modified Epoxy Resin, Proprietary Modified Acrylate

All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

**SECTION 3: PHYSICAL PROPERTY INFORMATION** 

Boiling Point: N/A Vapor Density (Air=1): >1

Solubility In Water:

% Volatile (By Weight):

Specific Gravity (Water=1):

Vapor Pressure (mm Hg):

Melting Or Freezing Point:

Negligible

1.0 - 1.4

N/A

N/A

Evaporation Rate (Butyl Acetate=1): <1

Appearance/Odor: Amber / Slight Odor

SECTION 4: FIRE AND EXPLOSION HAZARD DATA

Flash Point: >295°F Auto Ignition Temp: N/A
Lower Explosion Limit (%): N/A Upper Explosion Limit (%): N/A

**Extinguishing Media:** Foam, C02, Dry Chemical, Water Spray

**SECTION 5: HEALTH HAZARD DATA** 

**Effects of Overexposure:** 

*Inhalation:* Mist or vapor can irritate the nose and throat.

**Eye Contact:** Substantially irritating to eyes.

Skin Contact: Substance is moderately irritating and can cause superficial burns after

prolonged contact. Not absorbed in toxic amounts

Ingestion: Harmful if swallowed.

**Delayed Effects:** Prolonged or repeated exposure can cause allergic reaction.

**SECTION 6: EMERGENCY AND FIRST AID PROCEDURES** 

Inhalation: Move subject to fresh air. Give artificial respiration if breathing has

stopped.

**Eye and Skin Contact:** Flush eyes with a large amount of water for at least 15 minutes. Get prompt medical attention. Wash skin thoroughly with soap and water. Remove and wash clothing before reuse.

*Ingestion:* If swallowed dilute by giving 2 glasses of water to drink. See a physician. Never give anything by mouth to an unconscious person.

#### SECTION 7: REACTIVITY INFORMATION

*Hazards:* High temp., Inhibitor depletion, accidental impurities, exposure to radiation or oxidizers may cause spontaneous polymerizing reaction generating heat and pressure. Closed containers may rupture or explode during runaway polymerization.

#### **SECTION 8: SPILL OR LEAK PROCEDURES**

Dike and absorb spill on inert material (sand, earth, etc.). Transfer diking material to containers for disposal. Wear protective clothing. Use breathing apparatus (MSHA/NIOSH approved, pressure-demand, self-contained) or air mask for large spills in confined area. Wash clothing before reuse. Destroy clothing that cannot be decontaminated (i.e. Shoes).

**Waste Disposal Methods:** Landfill or incinerate contaminated in accordance with local, state and federal regulations. Dispose of material in approved equipment.

#### **SECTION 9: SPECIAL PROTECTION INFORMATION**

Ventilation Type: Normal room ventilation.

**Respiratory Protection:** None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH approved or equivalent) suitable for concentrations and types of air contaminants encountered.

Protective Gloves: Impervious.

Eye Protection: Chemical splash goggles (ANSI Z-871 or approved equivalent).

Other Protective Equipment: Eyewash facility.

#### **SECTION 10: SPECIAL PRECAUTIONS**

Store away from excessive heat (e.g., steam-pipes, radiators, from sources of ignition, and from reactive materials). Do not store near food or feed. Avoid all eye and skin contact.

**Note To Physician:** Allergic dermatitis or respiratory response in susceptible individuals may be delayed even weeks or months after frequent and/or prolonged contact. Acute effects can include mucosa damage, severe laryngeal edema, and shock associated with corrosive agents. Possible mucosa damage may contraindicate the use of gastric lavage. (This product is not approved by FDA for internal use).

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DATE PREPARED: 11/01/85 DATE REVISED: 02/23/06

<sup>\*</sup>Please note all materials contained are listed on the EPA TOSCA Inventory list.

#### **Bond-IT 7056 Hardener**

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

#### **SECTION ONE:**

Chemical Name And Synonyms: N/A Mixture\*

Formula: N/A

Chemical Family: Amine Complex.

#### **SECTION 2: PHYSICAL PROPERTY INFORMATION**

Boiling Point: N/A Vapor Density (Air=1): >1

Solubility In Water: Negligible % Volatile (By Weight): Negligible

Melting Or Freezing Point:N/AVapor Pressure (mm Hg):N/ASpecific Gravity (Water=1):0.93 - 1.30

Evaporation Rate (Butvl Acetate=1): <1

Appearance/Odor: Yellow or Amber/Amine Odor

All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

#### SECTION 3: FIRE AND EXPLOSION HAZARD DATA

Flash Point: >200°F
Auto Ignition Temp: N/A
Lower Explosion Limit (%): N/A

Upper Explosion Limit (%): N/A

Extinguishing Media: Foam, C02, Dry Chemical: Water Spray

SECTION 4: HEALTH HAZARD DATA

Effects Of Overexposure:

*Inhalation:* Mist/Vapor can irritate the nose and throat.

*Eye Contact:* Substantially irritating to eyes.

Skin Contact: Substance is moderately irritating and can cause superficial burns after

prolonged contact.

*Ingestion:* Harmful if swallowed.

*Delayed Effects:* Prolonged or repeated exposure can cause allergic reaction.

#### DATE PREPARED: 11/01/85 DATE REVISED: 02/23/06

#### **SECTION 5: EMERGENCY AND FIRST AID PROCEDURES**

**Inhalation:** Move subject to fresh air. Give artificial respiration if breathing has stopped. **Eye And Skin Contact:** Flush eyes with a large amount of water for at least 15 minutes. Get prompt medical attention. Wash skin thoroughly with soap and water.

Remove and wash clothing before reuse.

Ingestion: If swallowed dilute by giving 2 glasses of water to drink. See a physician.

Never give anything by mouth to an unconscious person.

#### **SECTION 6: REACTIVITY INFORMATION**

Stability: Stable

Hazardous Polymerization: Will not occur

#### **SECTION 7: SPILL OR LEAK PROCEDURES**

Dike and absorb spill on inert material (sand, earth, etc.). Transfer diking material to containers for disposal. Wear protective clothing. Use breathing apparatus (MSHA/NIOSH approved, pressure-demand, self-contained) or air mask for large spills in confined area. Wash clothing before reuse. Destroy clothing that cannot be decontaminated (i.e. Shoes).

**Waste Disposal Methods:** Incinerate liquid in approved equipment. Landfill or incinerate contaminated diking material in accordance with local, state and federal regulations.

#### **SECTION 8: SPECIAL PROTECTION INFORMATION**

**Ventilation Type:** Normal room ventilation.

**Respiratory Protection:** None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH approved or equivalent) suitable for concentrations and types of air contaminants encountered.

Protective Gloves: Impervious.

Eye Protection: Chemical splash goggles (ANSI Z-871 or approved equivalent).

Other Protective Equipment: Eyewash facility.

#### **SECTION 9: SPECIAL PRECAUTIONS**

Store away from excessive heat (e.g., steam-pipes, radiators, from sources of ignition, and from reactive materials). Do not store near food or feed. Avoid all eye and skin contact.

*Misc Info:* The use of this and auxiliary materials should be confined to designated work areas. Emptied containers may still contain hazardous residues.

**Note To Physician:** Allergic dermatitis or respiratory response in susceptible individuals may be delayed even weeks or months after frequent and/or prolonged contact. Acute effects can include mucosa damage, severe laryngeal edema, and shock associated with corrosive agents. Possible mucosa damage may contraindicate the use of gastric lavage.

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HIMS RATING Health = 2 Fire = 1 Reactivity = 0 HAZARD RATING: 0 = Insignificant 1 = Non-Toxic, Slight 2 = Moderate 3 = High 4 = Extreme

<sup>\*</sup>Note all materials contained are listed on the EPA TSCA Inventory list.

#### Bond-IT 7056 AL Resin

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

**SECTION 1: PRODUCT IDENTIFICATION** 

**Chemical Name And Synonyms:** N/A Mixture

Chemical Formula: N/A

Chemical Family: Proprietary Modified Epoxy Resin.\*

**SECTION 2: COMPOSITION INFORMATION** 

*Material:* Proprietary Modified Epoxy Resin, Proprietary Modified Acrylate

All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

**SECTION 3: PHYSICAL PROPERTY INFORMATION** 

Boiling Point: N/A Vapor Density (Air=1): >1

Solubility In Water:

% Volatile (By Weight):

Specific Gravity (Water=1):

Vapor Pressure (mm Hg):

Melting Or Freezing Point:

Negligible

1.0 - 1.4

N/A

Evaporation Rate (Butyl Acetate=1): <1

Appearance/Odor: Amber / Slight Odor

SECTION 4: FIRE AND EXPLOSION HAZARD DATA

Flash Point: > 295°F Auto Ignition Temp: N/A

Lower Explosion Limit (%): N/A Upper Explosion Limit (%): N/A

**Extinguishing Media:** Foam, C02, Dry Chemical, Water Spray

**SECTION 5: HEALTH HAZARD DATA** 

**Effects of Overexposure:** 

*Inhalation:* Mist or vapor can irritate the nose and throat.

Eye Contact: Substantially irritating to eyes.

Skin Contact: Substance is moderately irritating and can cause superficial burns after

prolonged contact. Not absorbed in toxic amounts

Ingestion: Harmful if swallowed.

**Delayed Effects:** Prolonged or repeated exposure can cause allergic reaction.

**SECTION 6: EMERGENCY AND FIRST AID PROCEDURES** 

Inhalation: Move subject to fresh air. Give artificial respiration if breathing has

stopped.

**Eye and Skin Contact:** Flush eyes with a large amount of water for at least 15 minutes. Get prompt medical attention. Wash skin thoroughly with soap and water. Remove and wash clothing before reuse.

*Ingestion:* If swallowed dilute by giving 2 glasses of water to drink. See a physician. Never give anything by mouth to an unconscious person.

#### SECTION 7: REACTIVITY INFORMATION

*Hazards:* High temp., Inhibitor depletion, accidental impurities, exposure to radiation or oxidizers may cause spontaneous polymerizing reaction generating heat and pressure. Closed containers may rupture or explode during runaway polymerization.

#### **SECTION 8: SPILL OR LEAK PROCEDURES**

Dike and absorb spill on inert material (sand, earth, etc.). Transfer diking material to containers for disposal. Wear protective clothing. Use breathing apparatus (MSHA/NIOSH approved, pressure-demand, self-contained) or air mask for large spills in confined area. Wash clothing before reuse. Destroy clothing that cannot be decontaminated (i.e. Shoes).

**Waste Disposal Methods:** Landfill or incinerate contaminated in accordance with local, state and federal regulations. Dispose of material in approved equipment.

#### **SECTION 9: SPECIAL PROTECTION INFORMATION**

**Ventilation Type:** Normal room ventilation.

**Respiratory Protection:** None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH approved or equivalent) suitable for concentrations and types of air contaminants encountered.

Protective Gloves: Impervious.

Eye Protection: Chemical splash goggles (ANSI Z-871 or approved equivalent).

Other Protective Equipment: Eyewash facility.

#### **SECTION 10: SPECIAL PRECAUTIONS**

Store away from excessive heat (e.g., steam-pipes, radiators, from sources of ignition, and from reactive materials). Do not store near food or feed. Avoid all eye and skin contact.

**Note To Physician:** Allergic dermatitis or respiratory response in susceptible individuals may be delayed even weeks or months after frequent and/or prolonged contact. Acute effects can include mucosa damage, severe laryngeal edema, and shock associated with corrosive agents. Possible mucosa damage may contraindicate the use of gastric lavage. (This product is not approved by FDA for internal use).

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DATE PREPARED: 11/01/85 DATE REVISED: 02/23/06

<sup>\*</sup>Please note all materials contained are listed on the EPA TSCA Inventory list.

#### **BOND-IT 7056 AL Hardener**

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

**SECTION ONE** 

Chemical Name And Synonyms: N/A Mixture

Formula:

Chemical Family: Amine Complex

SECTION 2: PHYSICAL PROPERTY INFORMATION

**Boiling Point:** N/A Vapor Density (Air=1): >1

Solubility In Water: Negligible % Volatile (By Weight): Negligible Melting Or Freezing Point: N/A

Vapor Pressure (mm Hg): N/A Specific Gravity (Water=1): 1.3 - 1.5

Evaporation Rate (Butyl Acetate=1): <1

Off grey opaque liquid/Amine odor Appearance/Odor:

All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

**SECTION 3: FIRE AND EXPLOSION HAZARD DATA** 

Flash Point: >200°F Auto Ignition Temp: N/A Lower Explosion Limit (%): N/A Upper Explosion Limit (%): N/A

Extinguishing Media: Foam, C02, Drv Chemical: Water Spray

**SECTION 4: HEALTH HAZARD DATA** 

**Effects Of Overexposure:** 

Inhalation: Mist/Vapor can irritate the nose and throat.

**Eve Contact:** Substantially irritating to eyes.

Skin Contact: Substance is moderately irritating and can cause superficial burns after

prolonged contact.

Ingestion: Harmful if swallowed.

**Delayed Effects:** Prolonged or repeated exposure can cause allergic reaction.

\*Note all materials contained are listed on the EPA TSCA Inventory list.

#### SECTION 5: EMERGENCY AND FIRST AID PROCEDURES

Inhalation: Move subject to fresh air. Give artificial respiration if breathing has stopped.

Eye And Skin Contact: Flush eyes with a large amount of water for at least 15 minutes. Get prompt medical attention. Wash skin thoroughly with soap and water.

Remove and wash clothing before reuse.

Ingestion: If swallowed dilute by giving 2 glasses of water to drink. See a physician.

Never give anything by mouth to an unconscious person.

SECTION 6: REACTIVITY INFORMATION

Stability: Stable

Hazardous Polymerization: Will not occur

SECTION 7: SPILL OR LEAK PROCEDURES

Dike and absorb spill on inert material (sand, earth, etc.). Transfer diking material to containers for disposal. Wear protective clothing. Use breathing apparatus (MSHA/NIOSH approved, pressure-demand, self-contained) or air mask for large spills in confined area. Wash clothing before reuse. Destroy clothing that cannot be decontaminated (i.e. Shoes).

Waste Disposal Methods: Landfill or incinerate contaminated in accordance with local, state and federal regulations. Dispose of material in approved equipment.

#### SECTION 8: SPECIAL PROTECTION INFORMATION

Ventilation Type: Normal room ventilation.

**Respiratory Protection:** None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH approved or equivalent) suitable for concentrations and types

of air contaminants encountered. Protective Gloves: Impervious.

Eye Protection: Chemical splash goggles (ANSI Z-871 or approved equivalent).

Other Protective Equipment: Eyewash facility.

#### **SECTION 9: SPECIAL PRECAUTIONS**

Store away from excessive heat (e.g., steam-pipes, radiators, from sources of ignition, and from reactive materials). Do not store near food or feed. Avoid all eye and skin contact.

Misc Info: The use of this and auxiliary materials should be confined to designated work areas. Emptied containers may still contain hazardous residues.

Note To Physician: Allergic dermatitis or respiratory response in susceptible individuals may be delayed even weeks or months after frequent and/or prolonged contact. Acute effects can include mucosa damage, severe larvngeal edema, and shock associated with corrosive agents. Possible mucosa damage may contraindicate the use of gastric lavage.

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Date Prepared 11/01/85

Date Revised 02/23/06

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HIMS RATING Health = 2 Fire = 1 Reactivity = 0 HAZARD RATING: 0 = Insignificant 1 = Non-Toxic, Slight 2 = Moderate 3 = High 4 = Extreme

## MATERIAL SAFETY DATA SHEET COTRONICS CORPORATION

#### **BOND IT 7057**

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

#### **SECTION ONE**

Chemical Name And Synonyms: See Below

Formula: Mixture of Alpha-Cyanoacrylate Esters

Chemical Family: Cvanoacrylate

Comments: N/A

#### **SECTION 2: COMPOSITION INFORMATION**

Material: Alpha-Cyanoacrylate Esters Nature of Hazard: Skin and Eye Irritant

Threshold limit value notestablished for this mixture by OSHA or the ACGIH

All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

#### **SECTION 3: PHYSICAL PROPERTY INFORMATION**

Appearance/Odor: Clear colorless liquid with a characteristic irritating

acrid odor

Melting Or Freezing Point: N/A

Boiling Point:149 °F at 6 mmHgVapor Pressure:less than 2 at 680°FVapor Density (Air=1):Greater than 1

Solubility In Water: Insoluble
% Volatile (By Volume): N/A
Evaporation Rate (Ether=1): N/A
Specific Gravity (Water=1): 0.9 -1.1

#### SECTION 4: FIRE AND EXPLOSION HAZARD DATA

Flash Point: 180°F C.O.C.

Lower Explosion Limit (%): Not determined

Extinguishing Media: CO2 Foam or Dry Chemical

**Special Firefighting Procedures:** None for lab quantities, industrial quantities wear personal protective equipment to avoid fumes and direct contact with product

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DATE PREPARED: 6/11/92 DATE REVISED: 02/23/06

#### **SECTION 5: HEALTH HAZARD DATA**

#### **Effects of Overexposure:**

**Eye Contact:** Vapors are irritating. Liquid can bond eyes closed. **Skin Contact:** Irritation Immediately bonds surfaces together.

*Ingestion:* liquid is irritating and will rapidly bond mucosa and lips together. *Inhalation:* Vapor is irritating to entire respiratory system. May worsen pre-existing

pulmonary disorders as emphysema or asthma.

#### **Emergency and First Aid Procedures:**

*Ingestion:* Give water to drink, induce vomiting and contact a physician acute toxicity is not expected to be high.

**Skin:** Avoid pulling bonded tissue apart with force. Apply Bond It solvent or other suitable cyanoacrylate solvent and separate bonded skin slowly. Wash off with warm water and soap. If irritation persist contact a physician.

*Inhalation:* If inhaled, remove to fresh air. If breathing is difficult give oxygen and get medical attention.

*Eyes:* Hold lids open if possible immediately rinse well with water for 15 minutes. Get immediate medical attention.

**Carcinogenicity:** No ingredient identified as carcinogen or potential carcinogen by NTP, IARC or OSHA.

#### **SECTION 6: REACTIVITY INFORMATION**

Stability: Stable

**Hazardous Polymerization:** May occur if directly contaminated with an activator. **Hazardous Decomposition Products:** Combustion will form oxides of carbon and irritation nitrogen oxides.

Conditions To Avoid: Heat, moisture, direct sunlight

Incompatibility Materials to Avoid: water, acids, bases, peroxides will cause rapid

polymerization and liberation of heat.

#### **SECTION 7: SPILL OR LEAK PROCEDURES**

Aviod skin contact or excessive exposure to fumes. Flush with water to harden small spills then scrape up. Small spills can also be absorbed and destroyed with wet paper or cloth.

**Waste Disposal Methods:** Dump as chemical waste in metal container after material has hardened. Dispose of according to local state and federal regulations.

#### SECTION 8: SPECIAL PROTECTION INFORMATION

Ventilation Type: Local Exhaust is preferred.

**Respiratory Protection:** None required if good ventilation is maintained.

Protective Gloves: polyethylene gloves.

Eye Protection: Chemical splash goggles (ANSI Z-871 or approved equivalent).

Other Protective Equipment: Eyewash facility.

#### **SECTION 9: SPECIAL PRECAUTIONS**

Keep containers well closed. Store and use in cool, dry, well ventilated area. For professional use only. keep out of reach of children. Avoid heat and direct sunlight. Normal precautions of laboratory good housekeeping practices should be followed.

### **Duralco 9000 Epoxy Resin**

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

#### SECTION ONE:

Chemical Name And Synonyms: N/A Mixture

Chemical Formula: N/A

Chemical Family: Proprietary Modified Epoxy Resin

**SECTION 2: COMPOSITION INFORMATION** 

**Boiling Point:** N/A **Vapor Density (Air=1):** >1

Solubility In Water:

W Volatile (By Weight):

Specific Gravity (Water=1):

Vapor Pressure (mm Hg):

Melting Or Freezing Point:

N/A

Evaporation Rate (Butyl Acetate=1): <1

Appearance/Odor: Blue viscous liquid, characteristic mild odor.

All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

SECTION 3: FIRE AND EXPLOSION HAZARD DATA

Flash Point: >295°F Auto Ignition Temp: N/A Lower Explosion Limit (%): N/A Upper Explosion Limit (%): N/A

Extinguishing Media: Foam, C02, Dry Chemical: Water Spray

**SECTION 4: HEALTH HAZARD DATA** 

**Effects Of Overexposure:** 

Inhalation: Mist or vapor can irritate the nose and throat.

Eve Contact: Substantially irritating to eyes.

Skin Contact: Substance is moderately irritating and can cause superficial burns after

prolonged contact. Not absorbed in toxic amounts.

Ingestion: Possibly harmful if swallowed.

**Delayed Effects:** Prolonged or repeated exposure can cause allergic reaction.

DATE PREPARED: 11/01/85 DATE REVISED: 02/23/06

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#### **SECTION 5: EMERGENCY AND FIRST AID PROCEDURES**

**Inhalation:** Move subject to fresh air. Give artificial respiration if breathing has stopped. **Eye And Skin Contact:** Flush eyes with a large amount of water for at least 15 minutes. Get prompt medical attention. Wash skin thoroughly with soap and water. Remove and wash clothing before reuse.

*Ingestion:* If swallowed dilute by giving 2 glasses of water to drink. See a physician. Never give anything by mouth to an unconscious person.

#### **SECTION 6: REACTIVITY INFORMATION**

Stability: Stable

Hazardous Polymerization: Will Not Occur

#### SECTION 7: SPILL OR LEAK PROCEDURES

Dike and absorb spill on inert material (sand, earth, etc.). Transfer diking material to containers for disposal. Wear protective clothing. Use breathing apparatus (MSHA/NIOSH approved, pressure-demand, self-contained) or air mask for large spills in confined area. Wash clothing before reuse. Destroy clothing that cannot be decontaminated (i.e. Shoes).

**Waste Disposal Methods:** Incinerate liquid in approved equipment. Landfill or incinerate contaminated diking material in accordance with local, state and federal regulations.

#### **SECTION 8: SPECIAL PROTECTION INFORMATION**

**Ventilation Type:** Normal room ventilation.

**Respiratory Protection:** None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH approved or equivalent) suitable for concentrations and types of air contaminants encountered.

**Protective Gloves:** Impervious.

Eye Protection: Chemical splash goggles (ANSI Z-871 or approved equivalent).

Other Protective Equipment: Eyewash facility.

#### **SECTION 9: SPECIAL PRECAUTIONS**

Store away from excessive heat (e.g., steam-pipes, radiators, from sources of ignition, and from reactive materials). Do not store near food or feed. Corrosive to copper and brass on long storage.

Corrosive Material: Avoid all eye and skin contact.

*Misc Info:* The use of this and auxiliary materials should be confined to designated

work areas. Emptied containers may still contain hazardous residues.

**Note To Physician:** Allergic dermatitis or respiratory response in susceptible individuals may be delayed even weeks or months after frequent and/or prolonged contact. Acute effects can include mucosa damage, severe laryngeal edema, and shock associated with corrosive agents. Possible mucosa damage may contraindicate the use of gastric lavage.

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### **Duralco 9000 Epoxy Hardener**

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

**SECTION ONE** 

Chemical Name And Synonyms: N/A Mixture\*

Formula: N/A

Chemical Family: Amine Complex

**SECTION 2: PHYSICAL PROPERTY INFORMATION** 

Boiling Point: N/A Vapor Density (Air=1): >1

Solubility In Water:Negligible% Volatile (By Weight):NegligibleMelting Or Freezing Point:N/AVapor Pressure (mm Hg):N/ASpecific Gravity (Water=1):0.93 - 1.30

Evaporation Rate (Butyl Acetate=1): <1

Appearance/Odor: Transparent amber to opaque brown

liquid/Amine odor

All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

**SECTION 3: FIRE AND EXPLOSION HAZARD DATA** 

Flash Point: >200°F
Auto Ignition Temp: N/A
Lower Explosion Limit (%): N/A
Upper Explosion Limit (%): N/A

Extinguishing Media: Foam, C02, Dry Chemical: Water Spray

SECTION 4: HEALTH HAZARD DATA

**Effects Of Overexposure:** 

*Inhalation:* Mist/Vapor can irritate the nose and throat.

**Eve Contact:** Substantially irritating to eyes.

Skin Contact: Substance is moderately irritating and can cause superficial burns after

prolonged contact.

Ingestion: Possibly harmful if swallowed.

**Delayed Effects:** Prolonged or repeated exposure can cause allergic reaction.

DATE PREPARED: 11/01/85 DATE REVISED: 02/23/06

HIMS RATING Health = 2 Fire = 1 Reactivity = 0

#### **SECTION 5: EMERGENCY AND FIRST AID PROCEDURES**

**Inhalation:** Move subject to fresh air. Give artificial respiration if breathing has stopped. **Eye And Skin Contact:** Flush eyes with a large amount of water for at least 15 minutes. Get prompt medical attention. Wash skin thoroughly with soap and water. Remove and wash clothing before reuse.

*Ingestion:* If swallowed dilute by giving 2 glasses of water to drink. See a physician. Never give anything by mouth to an unconscious person.

#### **SECTION 6: REACTIVITY INFORMATION**

Stability: Stable
Hazardous Polymerization: Will not occur

#### SECTION 7: SPILL OR LEAK PROCEDURES

Dike and absorb spill on inert material (sand, earth, etc.). Transfer diking material to containers for disposal. Wear protective clothing. Use breathing apparatus (MSHA/NIOSH approved, pressure-demand, self-contained) or air mask for large spills in confined area. Wash clothing before reuse. Destroy clothing that cannot be decontaminated (i.e. Shoes).

**Waste Disposal Methods:** Landfill or incinerate contaminated in accordance with local, state and federal regulations. Dispose of material in approved equipment.

#### **SECTION 8: SPECIAL PROTECTION INFORMATION**

**Ventilation Type:** Normal room ventilation.

**Respiratory Protection:** None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH approved or equivalent) suitable for concentrations and types of air contaminants encountered.

Protective Gloves: Impervious.

Eye Protection: Chemical splash goggles (ANSI Z-871 or approved equivalent).

Other Protective Equipment: Eyewash facility.

#### **SECTION 9: SPECIAL PRECAUTIONS**

Store away from excessive heat (e.g., steam-pipes, radiators, from sources of ignition, and from reactive materials). Do not store near food or feed. Avoid all eye and skin contact.

**Misc Info:** The use of this and auxiliary materials should be confined to designated work areas. Emptied containers may still contain hazardous residues.

**Note To Physician:** Allergic dermatitis or respiratory response in susceptible individuals may be delayed even weeks or months after frequent and/or prolonged contact. Acute effects can include mucosa damage, severe laryngeal edema, and shock associated with corrosive agents. Possible mucosa damage may contraindicate the use of gastric lavage.

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HAZARD RATING: 0 = Insignificant 1 = Non-Toxic, Slight 2 = Moderate 3 = High 4 = Extreme

### DURABOND A54B DURABOND A54S DURABOND 454B EPOX-EEZ RK454

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

SECTION ONE: PRODUCT IDENTIFICATION

**Chemical Name and Synonyms:** N/A Mixture

Chemical Formula: N/A

**Chemical Family:** Proprietary Modified Epoxy Resin. All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

**SECTION 2: COMPOSITION INFORMATION** 

Material: Proprietary Modified Epoxy Resin

Nature of Hazard: Irritant

**SECTION 3: PHYSICAL PROPERTY INFORMATION** 

**Boiling Point:** N/A

Vapor Density (Air=1): >1

Solubility In Water:Negligible% Volatile (By Weight):NegligibleSpecific Gravity (Water=1):1.1 - 2.0Vapor Pressure (mm Hg):N/A

Melting Or Freezing Point: N/A
Evaporation Rate (Butyl Acetate=1): <1

Appearance/Odor: Grey To Viscous Black Liquid/Slight Odor

**SECTION 4: FIRE AND EXPLOSION HAZARD DATA** 

Flash Point: >295°F

Auto Ignition Temp: N/A
Lower Explosion Limit (%): N/A
Upper Explosion Limit (%): N/A

Extinguishing Media: Foam, C02, Dry Chemical: Water Spray

**SECTION 5: HEALTH HAZARD DATA** 

**Effects Of Overexposure:** 

Inhalation: Mist or vapor can irritate the nose and throat.

Eve Contact: Substantially irritating to eyes.

Skin Contact: Substance is moderately irritating and can cause superficial burns after

prolonged contact. Not absorbed in toxic amounts

Ingestion: Harmful if swallowed.

**Delayed Effects:** Prolonged or repeated exposure can cause allergic reaction.

#### SECTION 6: EMERGENCY AND FIRST AID PROCEDURES

**Inhalation:** Move subject to fresh air. Give artificial respiration if breathing has stopped. **Eye And Skin Contact:** Flush eyes with a large amount of water for at least 15 minutes. Get prompt medical attention. Wash skin thoroughly with soap and water. Remove and wash clothing before reuse.

*Ingestion:* If swallowed dilute by giving 2 glasses of water to drink. See a physician. Never give anything by mouth to an unconscious person.

#### SECTION 7: REACTIVITY INFORMATION

Stability: Stable

Hazardous Polymerization: Will Not Occur

#### SECTION 8: SPILL OR LEAK PROCEDURES

Dike and absorb spill on inert material (sand, earth, etc.). Transfer diking material to containers for disposal. Wear protective clothing. Use breathing apparatus (MSHA/NIOSH approved, pressure-demand, self-contained) or air mask for large spills in confined area. Wash clothing before reuse. Destroy clothing that cannot be decontaminated (i.e. Shoes).

**Waste Disposal Methods:** Incinerate liquid in approved equipment. Landfill or incinerate contaminated diking material in accordance with local, state and federal regulations.

#### **SECTION 9: SPECIAL PROTECTION INFORMATION**

Ventilation Type: Normal room ventilation.

**Respiratory Protection:** None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH approved or equivalent) suitable for concentrations and types of air contaminants encountered.

**Protective Gloves:** Impervious.

Eye Protection: Chemical splash goggles (ANSI Z-871 or approved equivalent).

Other Protective Equipment: Eyewash facility.

#### **SECTION 10: SPECIAL PRECAUTIONS**

**CONDITIONS TO AVOID**: Open flames, sparks, heat, electrical and static discharge. Store away from excessive heat (e.g., steam-pipes, radiators, from sources of ignition, and from reactive materials). Do not store near food or feed. Avoid all eye and skin contact.

**Note To Physician:** Allergic dermatitis or respiratory response in susceptible individuals may be delayed even weeks or months after frequent and/or prolonged contact. Acute effects can include mucosa damage, severe laryngeal edema, and shock associated with corrosive agents. Possible mucosa damage may contraindicate the use of gastric lavage. (This product is not approved by FDA for internal use).

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DATE PREPARED: 11/01/85 DATE REVISED: 02/23/06

### DURABOND A54B DURABOND A54S DURABOND 454B EPOX-EEZ Rk454

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

#### **SECTION ONE:**

Chemical Name And Synonyms N/A Mixture\*

Formula: N/A

Chemical Family: Amine Complex

All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

#### **SECTION 2: PHYSICAL PROPERTY INFORMATION**

Boiling Point: N/A Vapor Density (Air=1): >1

Solubility In Water:Negligible% Volatile (By Weight):NegligibleMelting Or Freezing Point:N/AVapor Pressure (mm Hg):N/ASpecific Gravity (Water=1):0.93 - 1.30

Evaporation Rate (Butyl Acetate=1): <1

Appearance/Odor: Black liquid/Amine odor

#### **SECTION 3: FIRE AND EXPLOSION HAZARD DATA**

Flash Point: >200°F
Auto Ignition Temp: N/A
Lower Explosion Limit (%): N/A
Upper Explosion Limit (%): N/A

Extinguishing Media: Foam, C02, Dry Chemical: Water Spray

#### **SECTION 4: HEALTH HAZARD DATA**

**Effects Of Overexposure:** 

*Inhalation:* Mist/Vapor can irritate the nose and throat.

Eye Contact: Substantially irritating to eyes.

Skin Contact: Substance is moderately irritating and can cause superficial burns after

prolonged contact.

Ingestion: Harmful if swallowed.

**Delayed Effects:** Prolonged or repeated exposure can cause allergic reaction.

DATE PREPARED: 11/01/85 DATE REVISED: 02/23/06

#### SECTION 5: EMERGENCY AND FIRST AID PROCEDURES

**Inhalation:** Move subject to fresh air. Give artificial respiration if breathing has stopped. **Eye And Skin Contact:** Flush eyes with a large amount of water for at least 15 minutes. Get prompt medical attention. Wash skin thoroughly with soap and water. Remove and wash clothing before reuse.

*Ingestion:* If swallowed dilute by giving 2 glasses of water to drink. See a physician. Never give anything by mouth to an unconscious person.

#### SECTION 6: REACTIVITY INFORMATION

Stability: Stable

Hazardous Polymerization: Will not occur

#### **SECTION 7: SPILL OR LEAK PROCEDURES**

Dike and absorb spill on inert material (sand, earth, etc.). Transfer diking material to containers for disposal. Wear protective clothing. Use breathing apparatus (MSHA/NIOSH approved, pressure-demand, self-contained) or air mask for large spills in confined area. Wash clothing before reuse. Destroy clothing that cannot be decontaminated (i.e. Shoes).

**Waste Disposal Methods:** Incinerate liquid in approved equipment. Landfill or incinerate contaminated diking material in accordance with local, state and federal regulations.

#### **SECTION 8: SPECIAL PROTECTION INFORMATION**

**Ventilation Type:** Normal room ventilation.

**Respiratory Protection:** None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH approved or equivalent) suitable for concentrations and types of air contaminants encountered.

**Protective Gloves:** Impervious.

Eye Protection: Chemical splash goggles (ANSI Z-871 or approved equivalent).

Other Protective Equipment: Eyewash facility.

#### **SECTION 9: SPECIAL PRECAUTIONS**

**CONDITIONS TO AVOID:** Open flames, sparks, heat, electrical and static discharge. Store away from excessive heat (e.g., steam-pipes, radiators, from sources of ignition, and from reactive materials). Do not store near food or feed. Avoid all eye and skin contact.

*Misc Info:* The use of this and auxiliary materials should be confined to designated work areas. Emptied containers may still contain hazardous residues.

**Note To Physician:** Allergic dermatitis or respiratory response in susceptible individuals may be delayed even weeks or months after frequent and/or prolonged contact. Acute effects can include mucosa damage, severe laryngeal edema, and shock associated with corrosive agents. Possible mucosa damage may contraindicate the use of gastric lavage.

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# MATERIAL SAFETY DATA SHEET COTRONICS EPOXY RESINS

# DURABOND A54B DURABOND A54S DURABOND 454B EPOX-EEZ RK454

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

SECTION ONE: PRODUCT IDENTIFICATION

**Chemical Name and Synonyms:** N/A Mixture

Chemical Formula: N/A

**Chemical Family:** Proprietary Modified Epoxy Resin. All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

**SECTION 2: COMPOSITION INFORMATION** 

Material: Proprietary Modified Epoxy Resin

Nature of Hazard: Irritant

**SECTION 3: PHYSICAL PROPERTY INFORMATION** 

**Boiling Point:** N/A

Vapor Density (Air=1): >1

Solubility In Water: Negligible % Volatile (By Weight): Negligible Specific Gravity (Water=1): 1.1 - 2.0

Vapor Pressure (mm Hg): N/A
Melting Or Freezing Point: N/A

Evaporation Rate (Butyl Acetate=1): <1

Appearance/Odor: Grey To Viscous Black Liquid/Slight Odor

SECTION 4: FIRE AND EXPLOSION HAZARD DATA

Flash Point: >295°F

Auto Ignition Temp: N/A
Lower Explosion Limit (%): N/A
Upper Explosion Limit (%): N/A

Extinguishing Media: Foam, C02, Dry Chemical: Water Spray

**SECTION 5: HEALTH HAZARD DATA** 

**Effects Of Overexposure:** 

Inhalation: Mist or vapor can irritate the nose and throat.

Eve Contact: Substantially irritating to eyes.

Skin Contact: Substance is moderately irritating and can cause superficial burns after

prolonged contact. Not absorbed in toxic amounts

Ingestion: Harmful if swallowed.

**Delayed Effects:** Prolonged or repeated exposure can cause allergic reaction.

#### SECTION 6: EMERGENCY AND FIRST AID PROCEDURES

**Inhalation:** Move subject to fresh air. Give artificial respiration if breathing has stopped. **Eye And Skin Contact:** Flush eyes with a large amount of water for at least 15 minutes. Get prompt medical attention. Wash skin thoroughly with soap and water. Remove and wash clothing before reuse.

*Ingestion:* If swallowed dilute by giving 2 glasses of water to drink. See a physician. Never give anything by mouth to an unconscious person.

#### SECTION 7: REACTIVITY INFORMATION

Stability: Stable

Hazardous Polymerization: Will Not Occur

#### **SECTION 8: SPILL OR LEAK PROCEDURES**

Dike and absorb spill on inert material (sand, earth, etc.). Transfer diking material to containers for disposal. Wear protective clothing. Use breathing apparatus (MSHA/NIOSH approved, pressure-demand, self-contained) or air mask for large spills in confined area. Wash clothing before reuse. Destroy clothing that cannot be decontaminated (i.e. Shoes).

**Waste Disposal Methods:** Incinerate liquid in approved equipment. Landfill or incinerate contaminated diking material in accordance with local, state and federal regulations.

#### **SECTION 9: SPECIAL PROTECTION INFORMATION**

Ventilation Type: Normal room ventilation.

**Respiratory Protection:** None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH approved or equivalent) suitable for concentrations and types

of air contaminants encountered. **Protective Gloves:** Impervious.

Eye Protection: Chemical splash goggles (ANSI Z-871 or approved equivalent).

Other Protective Equipment: Eyewash facility.

#### **SECTION 10: SPECIAL PRECAUTIONS**

Store away from excessive heat (e.g., steam-pipes, radiators, from sources of ignition, and from reactive materials). Do not store near food or feed. Avoid all eye and skin contact.

**Note To Physician:** Allergic dermatitis or respiratory response in susceptible individuals may be delayed even weeks or months after frequent and/or prolonged contact. Acute effects can include mucosa damage, severe laryngeal edema, and shock associated with corrosive agents. Possible mucosa damage may contraindicate the use of gastric lavage. (This product is not approved by FDA for internal use).

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DATE PREPARED: 11/01/85 DATE REVISED: 02/23/06

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# MATERIAL SAFETY DATA SHEET COTRONICS EPOXY HARDENERS

# DURABOND A54B DURABOND A54S DURABOND 454B EPOX-EEZ Rk454

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

#### **SECTION ONE:**

Chemical Name And Synonyms N/A Mixture\*

Formula: N/A

Chemical Family: Amine Complex

All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

#### **SECTION 2: PHYSICAL PROPERTY INFORMATION**

Boiling Point: N/A Vapor Density (Air=1): >1

Solubility In Water:Negligible% Volatile (By Weight):NegligibleMelting Or Freezing Point:N/AVapor Pressure (mm Hg):N/ASpecific Gravity (Water=1):0.93 - 1.30

Evaporation Rate (Butyl Acetate=1): <1

Appearance/Odor: Black liquid/Amine odor

#### **SECTION 3: FIRE AND EXPLOSION HAZARD DATA**

Flash Point: >200°F
Auto Ignition Temp: N/A
Lower Explosion Limit (%): N/A
Upper Explosion Limit (%): N/A

Extinguishing Media: Foam, C02, Dry Chemical: Water Spray

#### **SECTION 4: HEALTH HAZARD DATA**

**Effects Of Overexposure:** 

*Inhalation:* Mist/Vapor can irritate the nose and throat.

Eye Contact: Substantially irritating to eyes.

Skin Contact: Substance is moderately irritating and can cause superficial burns after

prolonged contact.

Ingestion: Harmful if swallowed.

DATE PREPARED: 11/01/85

**Delayed Effects:** Prolonged or repeated exposure can cause allergic reaction.

#### SECTION 5: EMERGENCY AND FIRST AID PROCEDURES

**Inhalation:** Move subject to fresh air. Give artificial respiration if breathing has stopped. **Eye And Skin Contact:** Flush eyes with a large amount of water for at least 15 minutes. Get prompt medical attention. Wash skin thoroughly with soap and water. Remove and wash clothing before reuse.

*Ingestion:* If swallowed dilute by giving 2 glasses of water to drink. See a physician. Never give anything by mouth to an unconscious person.

#### SECTION 6: REACTIVITY INFORMATION

Stability: Stable

Hazardous Polymerization: Will not occur

#### **SECTION 7: SPILL OR LEAK PROCEDURES**

Dike and absorb spill on inert material (sand, earth, etc.). Transfer diking material to containers for disposal. Wear protective clothing. Use breathing apparatus (MSHA/NIOSH approved, pressure-demand, self-contained) or air mask for large spills in confined area. Wash clothing before reuse. Destroy clothing that cannot be decontaminated (i.e. Shoes).

**Waste Disposal Methods:** Incinerate liquid in approved equipment. Landfill or incinerate contaminated diking material in accordance with local, state and federal regulations.

#### **SECTION 8: SPECIAL PROTECTION INFORMATION**

**Ventilation Type:** Normal room ventilation.

**Respiratory Protection:** None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH approved or equivalent) suitable for concentrations and types of air contaminants encountered.

Protective Gloves: Impervious.

Eye Protection: Chemical splash goggles (ANSI Z-871 or approved equivalent).

Other Protective Equipment: Eyewash facility.

#### **SECTION 9: SPECIAL PRECAUTIONS**

Store away from excessive heat (e.g., steam-pipes, radiators, from sources of ignition, and from reactive materials). Do not store near food or feed. Avoid all eye and skin contact.

*Misc Info:* The use of this and auxiliary materials should be confined to designated work areas. Emptied containers may still contain hazardous residues.

**Note To Physician:** Allergic dermatitis or respiratory response in susceptible individuals may be delayed even weeks or months after frequent and/or prolonged contact. Acute effects can include mucosa damage, severe laryngeal edema, and shock associated with corrosive agents. Possible mucosa damage may contraindicate the use of gastric lavage.

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HIMS RATING Health = 2 Fire = 0 Reactivity = 0 HAZARD RATING: 0 = Insignificant 1 = Non-Toxic, Slight 2 = Moderate 3 = High 4 = Extreme

**DATE REVISED: 02/23/06** 

# PROPRIETARY MATERIAL SAFETY DATA SHEET COTRONICS CORPORATION

#### **ACCULITE**

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

**SECTION ONE: INGREDIENTS** 

Formula Mixture of Alpha-cyanoacrylate Esters

Synonym Acculite™ (all types)
Nature of Hazard Skin and Eye Irritant

Threshold limits TLV Not Established for this mixture by OSHA or ACGIH

**SECTION 2: PHYSICAL DATA** 

Appearance Odor: Clear colorless liquids with characteristic irritating

acrid odor, Fast set and regular set are thin watery

liquids. Gap fill is syrupy.

Melting Or Freezing Point: NA

Boiling Point: NA

Vapor Pressure (mm Hg): Less than 2 at 68°F

Vapor Density (Air=1): >1.

Solubility In Water: Insoluble
% Volatile (By Weight): NA
Specific Gravity (Water=1): 0.9-1.1
Evaporation Rate (Butyl Acetate=1): NA

All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

**SECTION 3: FIRE AND EXPLOSION HAZARD DATA** 

**Flash Point:** >180°V. C. O. C.

Auto Ignition Temp: N/A.
Lower Explosion Limit (%): N/A.
Upper Explosion Limit (%): N/A.

Extinguishing Media: Foam, C02, Dry.

Special Fire Fighting Procedures None for lab quantities, industrial quantities, wear

personal protective equipment to avoid fumes and direct contact

**Unusual Fire and Explosion Hazard None** 

**SECTION 4: HEALTH HAZARD DATA** 

**Effects Of Overexposure:** 

*Inhalation:* Mist or vapor is irritating to respiratory system may worsen pre existing pulmonary

disorders as emphysema or asthma.

Eye Contact: Substantially irritating to eyes.

Skin Contact: Substance is moderately irritating and will immediately bond surfaces

Ingestion: Liquid is irritating and will rapidly bond mucosa and lips.

No ingredient identified as a carcinogen or potential carcinogen by NTP or OSHA

#### **SECTION 5: EMERGENCY AND FIRST AID PROCEDURES**

**Inhalation:** Move subject to fresh air. Give artificial respiration if breathing has stopped. **Eye Contact:** Hold lids open if possible immediately rinse well with water for 15 min get immediate medical attention

**Skin Contact:** avoid pulling bonded tissue apart with force apply accusolve or other suitable cyanoacrylate solvents and separate bonded skin slowly wash off with warm

water and soap if irritation persists contact a physician.

Ingestion: If swallowed dilute by giving 2 glasses of water to drink. See a physician.

Never give anything by mouth to an unconscious person.

#### SECTION 6: REACTIVITY INFORMATION

Stability: Stable

Hazardous Polymerization: May occur if directly contaminated with an activator

Conditions to Avoid: Heat Moisture

Materials to Avoid: Water Acids Bases Peroxides will cause rapid

polymerization and liberation of heat.

#### **SECTION 7: SPILL OR LEAK PROCEDURES**

Avoid skin contact or excessive exposure to fumes, flush with water to harden small spills then scrape up small spills can also be absorbed and destroyed with wet paper or cloth

Waste Disposal Methods: Dump as chemical waste in closed metal container after material has hardened.

#### **SECTION 8: SPECIAL PROTECTION INFORMATION**

**Ventilation Type:** local exaust is preferred

**Respiratory Protection:** None required if good ventilation is maintained.

Protective Gloves: polyethylene gloves

Eye Protection: Chemical splash goggles(ANSI Z-871 or approved equivalent).

Other Protective Equipment: Eyewash facility.

#### **SECTION 9: SPECIAL PRECAUTIONS**

Keep cyanoacrylate well seperated from catalysts Store unopened bottles in refrigerator Store away from excessive heat (e.g., steam-pipes, radiators, from sources of ignition, and from reactive materials). Do not store near food or feed. Corrosive to copper and brass on long storage.

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DATE PREPARED: 11/01/85 DATE REVISED: 02/23/06

# MATERIAL SAFETY DATA SHEET TRADE NAME COTRONICS CERAMIC HARDENERS

900 Series Thinners and Hardeners

960 Hardener

310 Ceramic Hardener 3901A Ceramic Hardener 901A Ceramic Hardener 7010 Thermal Hardener

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

SECTION ONE: PRODUCT IDENTIFICATION

Chemical Name And Synonyms: N/A Mixture

Chemical Family: Alumina, Quartz, Magnesia, Zirconia, or Silica

**Chemical Family:** Refractory Ceramic Colloid Proprietary Silicate, Phosphate, Alumina, Zirconia, Colloid Bond.

#### SECTION 2: COMPOSITION INFORMATION

	As Manufactured:	WT. %	TVL/PEL
Α.	Liquid Binder or Thinner		
	Refractory Ceramic Colloid	20 - 50	N/A
	Water	50 - 80	
В.	After Normal Use See Section 8		
C.	Mist or Dried dust from spraying	30 - 50	10 mg/m <sup>3</sup>
	(Not formed in normal use)		

All Materials contained within are located on the TOSCA Inventory List

This product is compliant with the RoHS Directive.

#### **SECTION 3: PHYSICAL DATA**

	As Supplied	As Cured
Boiling Point (§F):	212ºF	N/A
Specific Gravity (H2O=1):	1.2 - 1.4	1.2-2.5
Vapor Pressure (mm Hg.) :	0.2-1.2	N/A
Vapor Density (Air=1):	>1	N/A
Percent Volatile By Volume:	20-50	N/A
Solubility In Water:	Soluble	Insoluble
Evaporation Rate (H2O=1):	1	N/A
Appearance/Odor:	Clear or Opalescent liquid	Solid
• •	/No Odor	No Odor

#### SECTION 4: FIRE AND EXPLOSION HAZARD DATA

#### **SECTION 5: HEALTH HAZARD DATA**

Primary Route Of Entry: Inhalation, Ingestion, Eyes and Skin Irritation.

Effects Of Overexposure: Long term overexposure to inhalation of mists or dust of dried down particles may cause tissue response in the lung (Pneumoconiosis).

Emergency & First Aid Procedures: Terminate exposure. Flush eyes with water for

15 minutes. Call a doctor

**SECTION 6: FIRE, EXPLOSIVE AND REACTIVITY DATA** 

N/A

**SECTION 7: SPILL OR LEAK PROCEDURES** 

**Recommended Procedures:** Routine Housekeeping

Waste Disposal Method: N/A

#### SECTION 8: SPECIAL PROTECTION INFORMATION

**Respiratory Protection (Specify Type):** Respiratory protection is not normally needed since the volatility and toxicity are low. If significant mists or aerosols are generated, wear a NIOSH approved or equivalent respirator, (ANSI Z-88.2, 1980 for requirements and selection).

**Ventilation:** Local Exhaust: Follow OSHA Standard 29 CFR 1910.94. **Mechanical (General):** Follow OSHA Standard 29 CFR 1910.94.

Protective Gloves: Recommended.

Eye Protection: Goggles/Safety Glasses Recommended.

Other Protective Equipment: As required to meet applicable OSHA Standards.

#### **SECTION 9: SPECIAL PRECAUTIONS**

Precautions To Be Taken After Use And Upon Removal: This product as manufactured is a Silicate could transform upon heating to mullet and crystobalite (a form of crystalline silica). Removal of this product after use may result in the generation of dust. Repeated inhalation of respirable free crystalline silica dust may cause delayed lung injury (silicosis). The recommended TLV/PEL for free crystalline silica is derived from the formula: 10 mg/cu m

½(-----)#

% Respirable quartz + 2

\*(Reference 1984-85 ACGIH TLV Booklet, Page 34). Appropriate ventilation should be provided and protective equipment should be worn in compliance with OSHA standard currently 29 CFR 1910.134 (NIOSH approved, air purifying, half mask or full face-piece respirator with appropriate filter pad or cartridge(s)).

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DATE PREPARED: 11/01/85 DATE REVISED: 02/23/06

# PROPRIETARY MATERIAL SAFETY DATA SHEET

### **COTRONICS EPOXY E032**

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

#### **SECTION ONE**

Chemical Family: CAS # %

Part A Resin:

Resin: Hardener:

Epoxy Resin \* <50% Aluminum Powder 7429-900-5 <60%

Part B Hardener:

Proprietary Organic Amine

All materials contained within are listed on the TOSCA Inventory list.

This product is compliant with the RoHS Directive.

#### **SECTION 2: PHYSICAL PROPERTY INFORMATION**

Appearance:
Viscous silver liquid.
Amber transparent liquid.

Odor:
Sweet odor.
Ammonia odor.

Melting Or Freezing Point:

N/A
Boiling Point:

Vapor Pressure (mm Hg):

Vapor Density (AIR=1):

N/A

Solubility In Water:

% Volatile (By Weight):

Negligible
Negligible

Specific Gravity (Water 1): Resin 1.5-1.9 g/cc Hardener 1.2-1.9 g/cc

Evaporation Rate (Butyl Acetate=1): <1.0

#### **SECTION 3: FIRE AND EXPLOSION HAZARD DATA**

Flash Point: >295°F.

Auto Ignition Temp: N/A

Lower Explosion Limit (%): N/A

Upper Explosion Limit (%): N/A

**Extinguishing Media:** Foam, C0<sub>2</sub>, Dry. **Chemical:** Water Spray.

#### **SECTION 4: HEALTH HAZARD DATA**

**Effects Of Overexposure:** 

**Inhalation:** Mist or vapor can irritate the nose and throat.

Eye Contact: Substantially irritating to eyes.

Skin Contact: Substance is moderately irritating and can cause superficial burns after

prolonged contact. Not absorbed in toxic amounts

Ingestion: Possibly harmful if swallowed. LD > 4000 mg/ Kg.

**Delayed Effects:** Prolonged or repeated exposure can cause allergic reaction.

#### SECTION 5: EMERGENCY AND FIRST AID PROCEDURES

**Inhalation:** Move subject to fresh air. Give artificial respiration if breathing has stopped. **Eye And Skin Contact:** Flush eyes with a large amount of water for at least 15 minutes. Get prompt medical attention. Wash skin thoroughly with soap and water. Remove and wash clothing before reuse.

Ingestion: If swallowed, dilute by giving 2 glasses of water to drink. See a physician.

Never give anything by mouth to an unconscious person.

#### **SECTION 6: REACTIVITY INFORMATION**

Stability: Stable.

Hazardous Polymerization: Will not occur.

#### SECTION 7: SPILL OR LEAK PROCEDURES

Dike and absorb spill on inert material (sand, earth, etc.). Transfer diking material to containers for disposal. Wear protective clothing. Use breathing apparatus (MSHA/NIOSH approved, pressure-demand, self-contained) or air mask for large spills in confined area. Wash clothing before reuse. Destroy clothing that cannot be decontaminated (i.e. Shoes).

**Waste Disposal Methods:** Incinerate liquid in approved equipment. Landfill or incinerate contaminated diking material in accordance with local, state and federal regulations.

#### **SECTION 8: SPECIAL PROTECTION INFORMATION**

**Ventilation Type:** Normal room ventilation.

**Respiratory Protection:** None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH approved or equivalent) suitable for concentrations and types of air contaminants encountered.

Protective Gloves: Impervious.

**Eye Protection**: Chemical splash goggles(ANSI Z-871 or approved equivalent)

Other Protective Equipment: Eyewash facility.

#### **SECTION 9: SPECIAL PRECAUTIONS**

**Storage:** Store away from excessive heat (e.g., steam-pipes, radiators, from sources of ignition, and from reactive materials). Do not store near food or feed.

Corrosive Material: Avoid all eye and skin contact...

*Misc Info:* The use of this and auxiliary materials should be confined to designated

work areas. Emptied containers may still contain hazardous residues.

**Note To Physician:** Allergic dermatitis or respiratory response in susceptible individuals may be delayed even weeks or months after frequent and/or prolonged contact. Acute effects can include mucosa damage, severe laryngeal edema, and shock associated with corrosive agents. Possible mucosa damage may contraindicate the use of gastric layage.

**Disclaimer:** The information supplied is not to be taken as a warranty or representation for which Cotronics Corp. assumes legal responsibility. It is offered solely for your consideration, investigation and verification. all risk of use, singly or in combination with other products, whether or not in accordance with the instructions, directions, or suggestions is borne by the user.

DATE PREPARED: 11/01/85 DATE REVISED: 02/23/06

<sup>\*</sup>proprietary Novalac Epoxy Resin

### Cotronics Instrumentation Adhesive E045 Epoxy Adhesive Part A Resin

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

#### **SECTION ONE:**

Chemical Name And Synonyms: N/A Mixture

Chemical Formula: N/A

Chemical Family: Proprietary Modified Epoxy Resin\*

#### **SECTION 2: PHYSICAL PROPERTY INFORMATION**

**Boiling Point:** N/A **Vapor Density (Air=1):** >1

Solubility In Water:

% Volatile (By Weight):

Specific Gravity (Water=1):

Vapor Pressure (mm Hg):

Melting Or Freezing Point:

Evaporation Rate (Butyl Acetate=1):

Negligible

Appearance/Odor: Viscous black liquid/Slight Odor

All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

#### SECTION 3: FIRE AND EXPLOSION HAZARD DATA

Flash Point: >295°F
Auto Ignition Temp: N/A
Lower Explosion Limit (%): N/A
Upper Explosion Limit (%): N/A

Extinguishing Media: Foam, C02, Dry Chemical: Water Spray

**SECTION 4: HEALTH HAZARD DATA** 

#### Effects Of Overexposure:

**Inhalation:** Mist or vapor can irritate the nose and throat.

Eye Contact: Substantially irritating to eyes.

Skin Contact: Substance is moderately irritating and can cause superficial burns after

prolonged contact. Not absorbed in toxic amounts

*Ingestion:* Possibly harmful if swallowed. LD > 4000mg/Kg.

**Delayed Effects:** Prolonged or repeated exposure can cause allergic reaction.

DATE PREPARED: 11/01/85 DATE REVISED: 02/23/06

SECTION 5: EMERGENCY AND FIRST AID PROCEDURES

**Inhalation:** Move subject to fresh air. Give artificial respiration if breathing has stopped. **Eye And Skin Contact:** Flush eyes with a large amount of water for at least 15 minutes. Get prompt medical attention. Wash skin thoroughly with soap and water. Remove and wash clothing before reuse.

**Ingestion:** If swallowed dilute by giving 2 glasses of water to drink. See a physician.

Never give anything by mouth to an unconscious person.

#### SECTION 6: REACTIVITY INFORMATION

Stability: Stable Hazardous Polymerization: Will not occur.

#### **SECTION 7: SPILL OR LEAK PROCEDURES**

Dike and absorb spill on inert material (sand, earth, etc.). Transfer diking material to containers for disposal. Wear protective clothing. Use breathing apparatus (MSHA/NIOSH approved, pressure-demand, self-contained) or air mask for large spills in confined area. Wash clothing before reuse. Destroy clothing that cannot be decontaminated (i.e. shoes).

**Waste Disposal Methods:** Incinerate liquid in approved equipment. Landfill or incinerate contaminated diking material in accordance with local, state and federal regulations.

#### **SECTION 8: SPECIAL PROTECTION INFORMATION**

**Ventilation Type:** Normal room ventilation.

**Respiratory Protection:** None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH approved or equivalent) suitable for concentrations and types of air contaminants encountered.

**Protective Gloves:** Impervious.

**Eve Protection:** Chemical splash goggles(ANSI Z-871 or approved equivalent).

Other Protective Equipment: Eyewash facility.

#### **SECTION 9: SPECIAL PRECAUTIONS**

Store away from excessive heat (e.g., steam-pipes, radiators, from sources of ignition, and from reactive materials). Do not store near food or feed. Corrosive to copper and brass on long storage.

Corrosive Material: Avoid all eye and skin contact.

*Misc. Info:* The use of this and auxiliary materials should be confined to designated work areas. Emptied containers may still contain hazardous residues.

**Note To Physician:** Allergic dermatitis or respiratory response in susceptible individuals may be delayed even weeks or months after frequent and/or prolonged contact. Acute effects can include mucosa damage, severe laryngeal edema, and shock associated with corrosive agents. Possible mucosa damage may contraindicate the use of gastric lavage.

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### Cotronics Instrumentation Adhesives E045 Epoxy Adhesive Part B Hardener

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

#### **SECTION ONE:**

Chemical Name And Synonyms: N/A Mixture\*

Formula: N/A

Chemical Family: Amine Complex

#### SECTION 2: PHYSICAL PROPERTY INFORMATION

**Boiling Point:** N/A **Vapor Density (Air=1):** >1

Solubility In Water:

% Volatile (By Weight):

Melting Or Freezing Point:

Vapor Pressure (mm Hg):

Negligible

N/A

N/A

Specific Gravity (Water=1): 0.93 To 1.30

Evaporation Rate (Butyl Acetate=1): <1

Appearance/Odor: Opaque amber liquid/Amine odor

All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

#### SECTION 3: FIRE AND EXPLOSION HAZARD DATA

Flash Point: >200°F
Auto Ignition Temp: N/A
Lower Explosion Limit (%): N/A
Upper Explosion Limit (%): N/A

Extinguishing Media: Foam, C02, Dry Chemical: Water Spray

#### **SECTION 4: HEALTH HAZARD DATA**

#### **Effects Of Overexposure:**

Inhalation: Mist/Vapor can irritate the nose and throat. LD50 = 9.8 Mg/L ALD

Eve Contact: Substantially irritating to eyes.

Skin Contact: Substance is moderately irritating and can cause superficial burns after

prolonged contact. LD50 = 7500 Mg/Kg ALD

Ingestion: Possibly harmful if swallowed. LD50 = 2500 Mg/Kg ALD

**Delayed Effects:** Prolonged or repeated exposure can cause allergic reaction.

DATE PREPARED: 11/01/85 DATE REVISED: 02/23/06

HIMS RATING Health = 1 Fire = 1 Reactivity = 1

#### Page 2 of 2

# SECTION 5: EMERGENCY AND FIRST AID PROCEDURES

**Inhalation:** Move subject to fresh air. Give artificial respiration if breathing has stopped. **Eye And Skin Contact:** Flush eyes with a large amount of water for at least 15 minutes. Get prompt medical attention. Wash skin thoroughly with soap and water. Remove and wash clothing before reuse.

*Ingestion:* If swallowed dilute by giving 2 glasses of water to drink. See a physician. Never give anything by mouth to an unconscious person.

#### SECTION 6: REACTIVITY INFORMATION

Stability: Stable
Hazardous Polymerization: Will not occur

#### **SECTION 7: SPILL OR LEAK PROCEDURES**

Dike and absorb spill on inert material (sand, earth, etc.). Transfer diking material to containers for disposal. Wear protective clothing. Use breathing apparatus (MSHA/NIOSH approved, pressure-demand, self-contained) or air mask for large spills in confined area. Wash clothing before reuse. Destroy clothing that cannot be decontaminated (i.e. shoes).

**Waste Disposal Methods:** Incinerate liquid in approved equipment. Landfill or incinerate contaminated diking material in accordance with local, state and federal regulations.

#### **SECTION 8: SPECIAL PROTECTION INFORMATION**

**Ventilation Type:** Normal room ventilation.

**Respiratory Protection:** None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH approved or equivalent) suitable for concentrations and types of air contaminants encountered.

Protective Gloves: Impervious.

Eye Protection: Chemical splash goggles (ANSI Z-871 or approved equivalent).

Other Protective Equipment: Eyewash facility.

#### **SECTION 9: SPECIAL PRECAUTIONS**

Store away from excessive heat (e.g., steam-pipes, radiators, from sources of ignition, and from reactive materials). Do not store near food or feed. Corrosive to copper and brass on long storage.

Corrosive Material: Avoid all eye and skin contact.

*Misc Info:* The use of this and auxiliary materials should be confined to designated work areas. Emptied containers may still contain hazardous residues.

**Note To Physician:** Allergic dermatitis or respiratory response in susceptible individuals may be delayed even weeks or months after frequent and/or prolonged contact. Acute effects can include mucosa damage, severe laryngeal edema, and shock associated with corrosive agents. Possible mucosa damage may contraindicate the use of gastric lavage.

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HAZARD RATING: 0 = Insignificant 1 = Non-Toxic, Slight 2 = Moderate 3 = High 4 = Extreme

<sup>\*</sup>Note all materials contained are listed on the EPA TSCA Inventory list.

# Cotronics Instrumentation Adhesive E094 Ceramic Adhesive

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

#### SECTION ONE:

Chemical Name And Synonyms: N/A Mixture

Chemical Family: Silica Chemical Formula: N/A

Part A: Powder

Refractory Ceramic Composition

Part B: Liquid Binder

Proprietary Silicate, Phosphate, Alumina, Colloid Bond

#### **SECTION 2: COMPOSITION INFORMATION**

A. As Manufactured: WT. % TVL/PEL Part A: Powder

Refractory Ceramic Powder 100 5 mg/ Cu M

Part B: Liquid Binder or Water

Refractory Ceramic Colloid 0 - 30 N/A

Water 0 - 100 **B. After Normal Use** See Section 8

All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

#### **SECTION 3: PHYSICAL DATA**

	As Supplied	Cured
Boiling Point (°F):	212	N/A
Vapor Density (Air=1):	>1	N/A
Specific Gravity Range (H2O=1):	1.5 - 3	1.2 - 2.5
Percent Volatile By Volume:	20 - 50	N/A
(%) Solubility In Water:	Soluble	Insoluble
Evaporation Rate (H2O=1):	1	N/A
Appearance/Odor:	Creamy Paste/No Odor	Solid
Vapor Pressure (mm Hg.):	0.2 - 1.2	N/A

#### **SECTION 4: FIRE AND EXPLOSION HAZARD DATA**

Extinguishing Media: N/A
Flash Point (Method Used): N/A
Flammable Limit: N/A
Unusual Fire And Explosive Hazards: LEL = N/A
Special Fire Fighting Procedures: UEL = N/A

DATE PREPARED: 11/01/85 DATE REVISED: 02/23/06

#### **SECTION 5: HEALTH HAZARD DATA**

**Effects Of Overexposure:** Slight dermatological irritation after prolonged skin contact. **Emergency And First Aid Procedures:** Flush eyes and skin with copious quantities of water. Get immediate medical attention for eyes. If swallowed, consult physician immediately.

#### **SECTION 6: FIRE, EXPLOSIVE AND REACTIVITY DATA**

Stability: Stable

Incompatibility (Materials To Avoid): Powdered aluminum metal.

Hazardous Decomposition Products: None

Hazardous Polymerization: Will Not Occur

#### SECTION 7: SPILL OR LEAK PROCEDURES

Steps To Be Taken In Case Material Is Released Or Spilled: Sweep up spilled powder and dispose in approved industrial waste container. Hose spilled wet cement paste with water, immediately. Cement is not water soluble after setting up. Note: Liquid is mild acid.

Waste Disposal Method: Approved industrial waste disposal means.

#### **SECTION 8: SPECIAL PROTECTION INFORMATION**

Respiratory Protection (Specify Type): NIOSH approved\*. Respirators

recommended for spray applications.

**Ventilation:** Local Exhaust: Vacuuming with the vacuum exhaust passing through a high efficiency particulate arresting (HEPA) filter is the exhaust is discharged into the workplace.

**Protective Gloves:** Recommended. **Eye Protection:** Recommended.

Other Protective Equipment: Rubber aprons, lab coats, etc. to protect clothing.

#### **SECTION 9: SPECIAL PRECAUTIONS**

**Precautions to be Taken in Handling and Storing:** Keep container closed and avoid getting wet until ready to use.

**Other Precautions:** wash hands thoroughly before eating or smoking. Avoid getting powder in body openings, including cuts, sores, mouth, etc.

Precautions To Be Taken After Use And Upon Removal: This product as manufactured may contain a Silicate. Which could transform upon heating to mullet and crystobalite (a form of crystalline silica). Removal of this product after use may result in the generation of dust. Repeated inhalation of respirable free crystalline silica dust may cause delayed lung injury (silicosis). The recommended TLV/PEL for free crystalline silica is derived from the formula: 10 mg/cu m

1/2(-----)#

% Respirable quartz + 2

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DOT ID. Number: Not Regulated

<sup>\*(</sup>Reference 1984-85 ACGIH TLV Booklet, Page 34). Appropriate ventilation should be provided and protective equipment should be worn in compliance with OSHA standard currently 29 CFR 1910.134 (NIOSH approved, air purifying, half mask or full face-piece respirator with appropriate filter pad or cartridge(s)).

### Cotronics Instrumentation Adhesive E098 Ceramic Adhesive

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

#### SECTION ONE:

Chemical Name And Synonyms: N/A Mixture
Chemical Family: Alumina
Chemical Formula: N/A

Refractory Ceramic Composition

Proprietary Silicate, Alumina Colloid Bond

#### **SECTION 2: COMPOSITION INFORMATION**

A. As Manufactured: WT. % TVL/PEL
Refractory Ceramic Powder 20 - 40 5 mg/ Cu M
Refractory Ceramic Colloid 20 - 30 5 mg/ Cu M
Water Balance

B. After Normal Use See Section 8

All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

#### **SECTION 3: PHYSICAL DATA**

0_0				
	As Supplied	Cured		
Boiling Point (°F):	212	N/A		
Vapor Density (Air=1):	>1	N/A		
Specific Gravity Range (H2O=1):	1.5 - 3	1.2 - 2.5		
Percent Volatile By Volume:	20 - 50	N/A		
(%) Solubility In Water:	Soluble	Insoluble		
Evaporation Rate (H2O=1):	1	N/A		
Appearance/Odor:	Creamy Paste/No Odor	Solid		
Vapor Pressure (mm Hq.):	0.2 - 1.2	N/A		

#### **SECTION 4: FIRE AND EXPLOSION HAZARD DATA**

Extinguishing Media: N/A
Flash Point (Method Used): N/A
Flammable Limit: N/A
Unusual Fire And Explosive Hazards: LEL = N/A
Special Fire Fighting Procedures: UEL = N/A

#### **SECTION 5: HEALTH HAZARD DATA**

**Effects Of Overexposure:** Slight dermatological irritation after prolonged skin contact. **Emergency And First Aid Procedures:** Flush eyes and skin with copious quantities of water. Get immediate medical attention for eyes. If swallowed, consult physician immediately.

DATE PREPARED: 11/01/85 DATE REVISED: 02/23/06

#### **SECTION 6: FIRE, EXPLOSIVE AND REACTIVITY DATA**

Stability: Stable

Incompatibility (Materials To Avoid): Powdered aluminum metal

Hazardous Decomposition Products: None

Hazardous Polymerization: Will Not Occur

#### SECTION 7: SPILL OR LEAK PROCEDURES

Steps To Be Taken In Case Material Is Released Or Spilled: Sweep up spilled powder and dispose in approved industrial waste container. Hose spilled wet cement paste with water, immediately. Cement is not water soluble after setting up. Note Liquid is mild acid.

Waste Disposal Method: Approved industrial waste disposal means.

#### **SECTION 8: SPECIAL PROTECTION INFORMATION**

**Respiratory Protection (Specify Type):** NIOSH approved\*. Respirators recommended for spray applications.

**Ventilation:** Local Exhaust: Vacuuming with the vacuum exhaust passing through a high efficiency particulate arresting (HEPA) filter is the exhaust is discharged into the workplace.

**Protective Gloves:** Recommended. **Eve Protection:** Recommended.

Other Protective Equipment: Rubber aprons, lab coats, etc. to protect clothing.

#### **SECTION 9: SPECIAL PRECAUTIONS**

**Precautions To Be Taken In Handling And Storing:** Keep container closed and avoid getting wet until ready to use.

Other Precautions: Wash Hands Thoroughly Before Eating Or Smoking. Avoid

Getting Powder In Body Openings, Including Cuts, Sores, Mouth, etc.

Precautions To Be Taken After Use And Upon Removal: This product as manufactured may contain a Silicate. Which could transform upon heating to mullet and crystobalite (a form of crystalline silica). Removal of this product after use may result in the generation of dust. Repeated inhalation of respirable free crystalline silica dust may cause delayed lung injury (silicosis). The recommended TLV/PEL for free crystalline silica is derived from the formula: 10 mg/cu m

1/2(-----)#

% Respirable quartz + 2

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<sup>\*(</sup>Reference 1984-85 ACGIH TLV Booklet, Page 34). Appropriate ventilation should be provided and protective equipment should be worn in compliance with OSHA standard currently 29 CFR 1910.134 (NIOSH approved, air purifying, half mask or full face-piece respirator with appropriate filter pad or cartridge(s)).

<sup>\*(</sup>Reference 1984-85 ACGIH TLV Booklet, Page 34). Appropriate ventilation should be provided and protective equipment should be worn in compliance with OSHA standard currently 29 CFR 1910.134 (NIOSH approved, air purifying, half mask or full face-piece respirator with appropriate filter pad or cartridge(s)).

# MATERIAL SAFETY DATA SHEET COTRONICS EPOXY RESINS

#### **DURALCO NM 25**

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

**SECTION 1: PRODUCT IDENTIFICATION** 

**Chemical Name And Synonyms:** N/A Mixture

Chemical Formula: N/A

Chemical Family: Proprietary Modified Epoxy Resin.\*

**SECTION 2: COMPOSITION INFORMATION** 

*Material:* Proprietary Modified Epoxy Resin

All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

**SECTION 3: PHYSICAL PROPERTY INFORMATION** 

**Boiling Point:** > 400°F

Vapor Density (Air=1): >1
Solubility In Water: Negligible

% Volatile (By Weight):
Specific Gravity (Water=1):
Vapor Pressure (mm Hg):
Nogligible
1.7 - 2.1

Vapor Pressure (mm Hg): N/A
Melting Or Freezing Point: < 40°F

Evaporation Rate (Butyl Acetate=1): <1

Appearance/Odor: Amber Transparent To Viscous Black Liquids/Slight Odor

SECTION 4: FIRE AND EXPLOSION HAZARD DATA

Flash Point: > 295°F

Auto Ignition Temp: N/A
Lower Explosion Limit (%): N/A
Upper Explosion Limit (%): N/A

Extinguishing Media: Foam, C02, Dry Chemical: Water Spray

**SECTION 5: HEALTH HAZARD DATA** 

**Effects Of Overexposure:** 

*Inhalation:* Mist or vapor can irritate the nose and throat.

**Eve Contact:** Substantially irritating to eyes.

Skin Contact: Substance is moderately irritating and can cause superficial burns after

prolonged contact. Not absorbed in toxic amounts

Ingestion: Possibly harmful if swallowed.

**Delayed Effects:** Prolonged or repeated exposure can cause allergic reaction.

#### **SECTION 6: EMERGENCY AND FIRST AID PROCEDURES**

**Inhalation:** Move subject to fresh air. Give artificial respiration if breathing has stopped. **Eye And Skin Contact:** Flush eyes with a large amount of water for at least 15 minutes. Get prompt medical attention. Wash skin thoroughly with soap and water. Remove and wash clothing before reuse.

Ingestion: If swallowed dilute by giving 2 glasses of water to drink. See a physician.

Never give anything by mouth to an unconscious person.

**SECTION 7: REACTIVITY INFORMATION** 

**Stability:** Stable **Hazardous Polymerization:** Will Not Occur

**SECTION 8: SPILL OR LEAK PROCEDURES** 

Dike and absorb spill on inert material (sand, earth, etc.). Transfer diking material to containers for disposal. Wear protective clothing. Use breathing apparatus (MSHA/NIOSH approved, pressure-demand, self-contained) or air mask for large spills in confined area. Wash clothing before reuse. Destroy clothing that cannot be decontaminated (i.e. Shoes).

**Waste Disposal Methods:** Landfill or incinerate contaminated in accordance with local, state and federal regulations. Dispose of material in approved equipment.

#### **SECTION 9: SPECIAL PROTECTION INFORMATION**

Ventilation Type: Normal room ventilation.

**Respiratory Protection:** None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH approved or equivalent) suitable for concentrations and types of air contaminants encountered.

Protective Gloves: Impervious.

Eye Protection: Chemical splash goggles (ANSI Z-871 or approved equivalent).

Other Protective Equipment: Eyewash facility.

#### SECTION 10: SPECIAL PRECAUTIONS

Store away from excessive heat (e.g., steam-pipes, radiators, from sources of ignition, and from reactive materials). Do not store near food or feed. Avoid all eye and skin contact.

**Note To Physician:** Allergic dermatitis or respiratory response in susceptible individuals may be delayed even weeks or months after frequent and/or prolonged contact. Acute effects can include mucosa damage, severe laryngeal edema, and shock associated with corrosive agents. Possible mucosa damage may contraindicate the use of gastric lavage. (This product is not approved by FDA for internal use).

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DATE PREPARED: 11/01/85 DATE REVISED: 02/23/06

# MATERIAL SAFETY DATA SHEET COTRONICS EPOXY HARDENERS

#### **DURALCO NM 25**

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

#### **SECTION ONE**

Chemical Name And Synonyms: N/A Mixture\*

Formula: N/A

Chemical Family: Amine Complex

#### **SECTION 2: PHYSICAL PROPERTY INFORMATION**

**Boiling Point:** N/A **Vapor Density (Air=1):** >1

Solubility In Water:Negligible% Volatile (By Weight):NegligibleMelting Or Freezing Point:N/AVapor Pressure (mm Hg):N/ASpecific Gravity (Water=1):0.93 - 1.30

Evaporation Rate (Butyl Acetate=1): <1

Appearance/Odor: Transparent amber to opaque brown

liquid/Amine odor

All materials contained within are listed on the TSCA Inventory list.

This product is compliant with the RoHS Directive.

#### **SECTION 3: FIRE AND EXPLOSION HAZARD DATA**

Flash Point: >200°F
Auto Ignition Temp: N/A
Lower Explosion Limit (%): N/A
Upper Explosion Limit (%): N/A

Extinguishing Media: Foam, C02, Dry Chemical: Water Spray

**SECTION 4: HEALTH HAZARD DATA** 

#### **Effects Of Overexposure:**

*Inhalation:* Mist/Vapor can irritate the nose and throat.

**Eve Contact:** Substantially irritating to eyes.

Skin Contact: Substance is moderately irritating and can cause superficial burns after

prolonged contact.

**Ingestion:** Possibly harmful if swallowed.

**Delayed Effects:** Prolonged or repeated exposure can cause allergic reaction.

DATE PREPARED: 11/01/85 DATE REVISED: 02/23/06

#### SECTION 5: EMERGENCY AND FIRST AID PROCEDURES

**Inhalation:** Move subject to fresh air. Give artificial respiration if breathing has stopped. **Eye And Skin Contact:** Flush eyes with a large amount of water for at least 15 minutes. Get prompt medical attention. Wash skin thoroughly with soap and water. Remove and wash clothing before reuse.

*Ingestion:* If swallowed dilute by giving 2 glasses of water to drink. See a physician. Never give anything by mouth to an unconscious person.

# SECTION 6: REACTIVITY INFORMATION

Stability: Stable

Hazardous Polymerization: Will not occur

#### SECTION 7: SPILL OR LEAK PROCEDURES

Dike and absorb spill on inert material (sand, earth, etc.). Transfer diking material to containers for disposal. Wear protective clothing. Use breathing apparatus (MSHA/NIOSH approved, pressure-demand, self-contained) or air mask for large spills in confined area. Wash clothing before reuse. Destroy clothing that cannot be decontaminated (i.e. Shoes).

**Waste Disposal Methods:** Landfill or incinerate contaminated in accordance with local, state and federal regulations. Dispose of material in approved equipment.

#### **SECTION 8: SPECIAL PROTECTION INFORMATION**

Ventilation Type: Normal room ventilation.

**Respiratory Protection:** None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH approved or equivalent) suitable for concentrations and types of air contaminants encountered.

Protective Gloves: Impervious.

Eye Protection: Chemical splash goggles (ANSI Z-871 or approved equivalent).

Other Protective Equipment: Eyewash facility.

#### **SECTION 9: SPECIAL PRECAUTIONS**

Store away from excessive heat (e.g., steam-pipes, radiators, from sources of ignition, and from reactive materials). Do not store near food or feed. Avoid all eye and skin contact.

*Misc Info:* The use of this and auxiliary materials should be confined to designated work areas. Emptied containers may still contain hazardous residues.

**Note To Physician:** Allergic dermatitis or respiratory response in susceptible individuals may be delayed even weeks or months after frequent and/or prolonged contact. Acute effects can include mucosa damage, severe laryngeal edema, and shock associated with corrosive agents. Possible mucosa damage may contraindicate the use of gastric lavage.

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### **COTRONICS CORPORATION**

R- 450 Anti Seize

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

**SECTION ONE:** 

Chemical Name And Synonyms: N/A Mixture

Formula: N/A Comments: N/A

Chemical Family: Proprietary Nickel Composition

**SECTION 2: COMPOSITION INFORMATION** 

CAS# WT. %:

Nickel 744-002-0 20-30

Non Hazardous Lubricant 5-15 Non Hazardous Organic Carrier 60-70

\*(1984-85 ACGIH TLV Booklet, Page 50)

All materials contained within are listed on the TOSCA Inventory list.

This product is compliant with the RoHS Directive.

**SECTION 3: PHYSICAL DATA** 

Boiling Point (°F): 700°F
Specific Gravity Range (H2O=1): 2.0-3.0
Vapor Pressure (mm Hg.): 0.0000086.
Vapor Density (Air=1): 10.0

Solubility in Water: 2.8 mg/l
Evaporate Rate Negligible

Appearance/Odor: Black Creamy Paste

No Odor

#### **SECTION 4: FIRE AND EXPLOSION HAZARD DATA**

Extinguishing Media: All Standard Methods

Flash Point (Method Used): 390 °F Flammable Limit: N/A Unusual Fire and Explosive Hazards: LEL = N/A Special Fire Fighting Procedures: UEL = N/A

Sara Section 313 Supplier Notification:

This product contains the following chemical (s) subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1968 and of 40 CFR 372: Nickel. Refer to the Hazardous Ingredients section of this MSDS for the appropriate CAS numbers.

DATE PREPARED: 01/01/89 DATE REVISED: 02/23/06

#### **SECTION 5: HEALTH HAZARD DATA**

Nickel: LD50: Oral Rat > 5000 mg/kg.

IARC found there was inadequate evidence that metallic nickel is carcinogenic to humans but since there was sufficient evidence that is carcinogenic to animals, IARC concluded that metallic nickel is possibly carcinogenic to humans. Epidemiological studies of workers exposed to nickel powder and to dust and fumes generated in the production of nickel alloys and of stainless steel have not indicated the presence of a significant respiratory cancer hazard.

**Effects Of Overexposure:** *Skin Contact:* Repeated contact with metallic nickel can cause nickel sensitivity and allergic skin rashes.

**Emergency And First Aid Procedures:** Flush eyes and skin with copious quantities of water. Get immediate medical attention for eyes. If swallowed, consult physician immediately.

#### SECTION 6: FIRE, EXPLOSIVE AND REACTIVITY DATA

Stability: Stable Incompatibility (Materials To Avoid): N/A Hazardous Decomposition Products: None

Hazardous Polymerization: Will Not Occur

#### **SECTION 7: SPILL OR LEAK PROCEDURES**

**Steps To Be Taken In Case Material Is Released Or Spilled:** Sweep up spilled powders and dispose in approved industrial waste container. Hose spilled liquids or mixed adhesive with water, immediately. 950,952, 954 adhesives are not water soluble after drying. **Waste Disposal Method:** Approved industrial waste disposal means.

#### SECTION 8: SPECIAL PROTECTION INFORMATION

**Respiratory Protection (Specify Type):** NIOSH approved\*. Respirators

recommended for spray applications.

**Ventilation:** Local Exhaust: Vacuuming with the vacuum exhaust passing through a high efficiency particulate arresting (HEPA) filter is the exhaust is discharged into the workplace.

Protective Gloves: Recommended. Eve Protection: Recommended.

Other Protective Equipment: Rubber aprons, lab coats, etc. to protect clothing.

#### **SECTION 9: SPECIAL PRECAUTIONS**

**Precautions To Be Taken In Handling And Storing:** Keep container closed and avoid getting wet until ready to use.

**Other Precautions:** Wash Hands Thoroughly Before Eating or Smoking. Avoid Getting Powder In Body Openings, Including Cuts, Sores, Mouth, Etc. Use With Adequate Ventilation. Avoid Repeated Skin Contact. Wash Skin Thoroughly After Handling.

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<sup>\*(</sup>Reference 1984-85 ACGIH TLV Booklet, Page 34). Appropriate ventilation should be provided and protective equipment should be worn in compliance with OSHA standard currently 29 CFR 1910.134 (NIOSH approved, air purifying, half mask or full face-piece respirator with appropriate filter pad or cartridge(s)).

# MATERIAL SAFETY DATA SHEET COTRONICS CORPORATION

#### **DURALCO T 507 RESIN**

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

#### **SECTION ONE:**

Chemical Name And Synonyms: N/A Mixture

Chemical Formula: N/A

Chemical Family: Proprietary Modified Epoxy Resin

Use with Cotronics' type two hardeners.

### **SECTION 2: PHYSICAL PROPERTY INFORMATION**

**Boiling Point:** N/A **Vapor Density (Air=1):** >1

Solubility In Water:Negligible% Volatile (By Weight):NegligibleSpecific Gravity (Water=1):1.3 - 1.9Vapor Pressure (mm Hg):N/AMelting Or Freezing Point:N/AEvaporation Rate (Butyl Acetate=1):<1</td>

Appearance/Odor: Amber Transparent Liquid To Viscous White.

All materials contained within are listed on the TOSCA Inventory list.

#### SECTION 3: FIRE AND EXPLOSION HAZARD DATA

Flash Point: >295°F
Auto Ignition Temp: N/D
Lower Explosion Limit (%): N/D
Upper Explosion Limit (%): N/D

Extinguishing Media: Foam, C02, Dry Chemical: Water Spray

#### **SECTION 4: HEALTH HAZARD DATA**

Effects Of Overexposure:

*Inhalation:* Mist or vapor can irritate the nose and throat.

Eye Contact: Substantially irritating to eyes.

Skin Contact: Substance is moderately irritating and can cause superficial burns after

prolonged contact. Not absorbed in toxic amounts.

**Ingestion:** Possibly harmful if swallowed. LD > 4000 mg/Kg.

Delayed Effects: Prolonged or repeated exposure can cause allergic reaction.

DATE PREPARED: 11/01/85 DATE REVISED: 05/05/05

#### SECTION 5: EMERGENCY AND FIRST AID PROCEDURES

**Inhalation:** Move subject to fresh air. Give artificial respiration if breathing has stopped. **Eye And Skin Contact:** Flush eyes with a large amount of water for at least 15 minutes. Get prompt medical attention. Wash skin thoroughly with soap and water. Remove and wash clothing before reuse.

*Ingestion:* If swallowed dilute by giving 2 glasses of water to drink. See a physician. Never give anything by mouth to an unconscious person.

#### **SECTION 6: REACTIVITY INFORMATION**

Stability: Stable

Hazardous Polymerization: Will Not Occur

#### **SECTION 7: SPILL OR LEAK PROCEDURES**

Dike and absorb spill on inert material (sand, earth, etc.). Transfer diking material to containers for disposal. Wear protective clothing. Use breathing apparatus (MSHA/NIOSH approved, pressure-demand, self-contained) or air mask for large spills in confined area. Wash clothing before reuse. Destroy clothing that cannot be decontaminated (i.e. Shoes).

**Waste Disposal Methods:** Incinerate liquid in approved equipment. Landfill or incinerate contaminated diking material in accordance with local, state and federal regulations.

#### **SECTION 8: SPECIAL PROTECTION INFORMATION**

Ventilation Type: Normal room ventilation.

**Respiratory Protection:** None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH approved or equivalent) suitable for concentrations and types of air contaminants encountered.

Protective Gloves: Impervious.

Eye Protection: Chemical splash goggles (ANSI Z-871 or approved equivalent).

Other Protective Equipment: Eyewash facility.

#### **SECTION 9: SPECIAL PRECAUTIONS**

Store away from excessive heat (e.g., steam-pipes, radiators, from sources of ignition, and from reactive materials). Do not store near food or feed. Corrosive to copper and brass on long storage.

Corrosive Material: Avoid all eye and skin contact.

*Misc Info:* The use of this and auxiliary materials should be confined to designated work areas. Emptied containers may still contain hazardous residues.

**Note To Physician:** Allergic dermatitis or respiratory response in susceptible individuals may be delayed even weeks or months after frequent and/or prolonged contact. Acute effects can include mucosa damage, severe laryngeal edema, and shock associated with corrosive agents. Possible mucosa damage may contraindicate the use of gastric lavage.

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# MATERIAL SAFETY DATA SHEET COTRONICS EPOXY HARDENERS

### **DURALCO T 507 HARDENER**

Manufactures Name: COTRONICS CORPORATION

3379 Shore Parkway Brooklyn, NY 11235 Emergency Telephone Number: 718-646-7996

#### **SECTION ONE:**

Chemical Name And Synonyms: N/A Mixture\*

Formula: N/A

Chemical Family: Amine Complex

#### **SECTION 2: PHYSICAL PROPERTY INFORMATION**

**Boiling Point:** N/A **Vapor Density (Air=1):** >1

Solubility In Water:

% Volatile (By Weight):

Melting Or Freezing Point:

Vapor Pressure (mm Hg):

Specific Gravity (Water=1):

Evaporation Rate (Butyl Acetate=1): <1

Appearance/Odor: Opaque amber liquid/Amine odor All materials contained within are listed on the TOSCA Inventory list.

#### **SECTION 3: FIRE AND EXPLOSION HAZARD DATA**

Flash Point: >200°F
Auto Ignition Temp: N/A
Lower Explosion Limit (%): N/A
Upper Explosion Limit (%): N/A

Extinguishing Media: Foam, C02, Dry Chemical: Water Spray

#### **SECTION 4: HEALTH HAZARD DATA**

Effects Of Overexposure:

Inhalation: Mist/Vapor can irritate the nose and throat. LD50 = 9.8 Mg/L ALC

*Eye Contact:* Substantially irritating to eyes.

Skin Contact: Substance is moderately irritating and can cause superficial burns after

prolonged contact. LD50 = 7500 Mg/Kg ALD

*Ingestion:* Possibly harmful if swallowed. LD50 = > 2500 Mg/Kg ALD *Delayed Effects:* Prolonged or repeated exposure can cause allergic reaction.

DATE PREPARED: 11/01/85 DATE REVISED: 08/05/03

#### SECTION 5: EMERGENCY AND FIRST AID PROCEDURES

*Inhalation*: Move subject to fresh air. Give artificial respiration if breathing has stopped.

*Eye And Skin Contact:* Flush eyes with a large amount of water for at least 15 minutes. Get prompt medical attention. Wash skin thoroughly with soap and water. Remove and wash clothing before reuse.

*Ingestion:* If swallowed dilute by giving 2 glasses of water to drink. See a physician. Never give anything by mouth to an unconscious person.

#### **SECTION 6: REACTIVITY INFORMATION**

Stability: Stable

Hazardous Polymerization: Will not occur

#### SECTION 7: SPILL OR LEAK PROCEDURES

Dike and absorb spill on inert material (sand, earth, etc.). Transfer diking material to containers for disposal. Wear protective clothing. Use breathing apparatus (MSHA/NIOSH approved, pressure-demand, self-contained) or air mask for large spills in confined area. Wash clothing before reuse. Destroy clothing that cannot be decontaminated (i.e. Shoes).

*Waste Disposal Methods:* Incinerate liquid in approved equipment. Landfill or incinerate contaminated diking material in accordance with local, state and federal regulations.

#### SECTION 8: SPECIAL PROTECTION INFORMATION

Ventilation Type: Normal room ventilation.

*Respiratory Protection:* None required if good ventilation is maintained. Wear respirator (MSHA/NIOSH approved or equivalent) suitable for concentrations and types of air contaminants encountered.

Protective Gloves: Impervious.

Eye Protection: Chemical splash goggles (ANSI Z-871 or approved equivalent). Other Protective Equipment: Eyewash facility.

#### **SECTION 9: SPECIAL PRECAUTIONS**

Store away from excessive heat (e.g., steam-pipes, radiators, from sources of ignition, and from reactive materials). Do not store near food or feed. Avoid all eye and skin contact

*Misc Info:* The use of this and auxiliary materials should be confined to designated work areas. Emptied containers may still contain hazardous residues. *Note To Physician:* Allergic dermatitis or respiratory response in susceptible

Note To Physician: Allergic dermatitis or respiratory response in susceptible individuals may be delayed even weeks or months after frequent and/or prolonged contact. Acute effects can include mucosa damage, severe laryngeal edema, and shock associated with corrosive agents. Possible mucosa damage may contraindicate the use of gastric lavage.

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<sup>\*</sup>Note all materials contained are listed on the EPA TOSCA Inventory list.