

# MATERIAL SAFETY DATA SHEET

## Cotronics Ceramic Adhesives

940 Zirconia Ceramic Adhesive  
940AL Alumina Ceramic Adhesive  
940LE Silica Ceramic Adhesive  
Part 1 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 or Zirconia)

**Part B:** Liquid Binder or Water (See Ceramic Hardeners MSDS)

Proprietary Silicate, Alumina, Zirconia, Colloid Bond

### SECTION 2: COMPOSITION INFORMATION

A. As Manufactured:	WT. %	TVL/PEL
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**Part A:** Powder

Refractory Ceramic Powder	100	5 mg/ Cu M
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**Part B:** Liquid Binder or Water

Refractory Ceramic Colloid	0 - 30	N/A
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Water	0 - 100	
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**B.** After Normal Use See Section 8

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

### SECTION 3: PHYSICAL DATA

	As Supplied	Cured
<b>Boiling Point (°F) :</b>	212	N/A
<b>Vapor Density (Air=1) :</b>	>1	N/A
<b>Specific Gravity Range (H<sub>2</sub>O=1) :</b>	1.5 - 3	1.2 - 2.5
<b>Percent Volatile By Volume:</b>	20 - 50	N/A
<b>(%) Solubility In Water:</b>	Soluble	Insoluble
<b>Evaporation Rate (H<sub>2</sub>O=1) :</b>	1	N/A
<b>Appearance/Odor:</b>	Creamy Paste/No Odor	Solid
<b>Vapor Pressure (mm Hg.) :</b>	0.2 - 1.2	N/A

### SECTION 4: FIRE AND EXPLOSION HAZARD DATA

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

<b>Stability:</b>	Stable
<b>Incompatibility (Materials to Avoid) :</b>	Aluminum metal powder.
<b>Hazardous Decomposition Products:</b>	None.
<b>Hazardous Polymerization:</b>	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 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:** 08/05/03

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

## TRADE NAME

### Resbond 940 940AL 940LE Part 2 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, Quartz, Zirconia, or Silica

**Chemical Family:** Refractory Ceramic Colloid, Proprietary Silicate, Colloid Bond.

#### SECTION 2: COMPOSITION INFORMATION

<b>As Manufactured:</b>	<b>WT. %</b>	<b>TVL/PEL</b>
<b>A.</b> Liquid Binder or Thinner		
Refractory Ceramic Colloid	20 - 50	N/A
Water	50 - 80	
<b>B.</b> After Normal Use See Section 8		
<b>C.</b> Mist or Dried dust from spraying (Not formed in normal use)	30 - 50	10 mg/m <sup>3</sup>

*All Materials contained within are located on the TOSCA Inventory List*

#### SECTION 3: PHYSICAL DATA

	<b>As Supplied</b>	<b>As Cured</b>
<b>Boiling Point (§F) :</b>	212°F	N/A
<b>Specific Gravity (H<sub>2</sub>O=1) :</b>	1.2 - 1.4	1.2-2.5
<b>Vapor Pressure (mm Hg.) :</b>	0.2-1.2	N/A
<b>Vapor Density (Air=1) :</b>	>1	N/A
<b>Percent Volatile By Volume:</b>	20-50	N/A
<b>Solubility In Water:</b>	Soluble	Insoluble
<b>Evaporation Rate (H<sub>2</sub>O=1) :</b>	1	N/A
<b>Appearance/Odor:</b>	Clear or Opalescent liquid No Odor	Solid No Odor

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

<b>Extinguishing Media:</b>	N/A
<b>Flash Point (Method Used) :</b>	N/A
<b>Flammable Limit:</b>	N/A
<b>Unusual Fire and Explosive Hazards:</b>	LEL = N/A
<b>Special Fire Fighting Procedures:</b>	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 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:  $10 \text{ mg/cu m} \times \frac{1}{2}(\text{-----})\%$   
% 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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