

MATERIAL SAFETY DATA SHEET

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

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 Mo 7439-98-7 Ch 7440-47-3 Ni 7440-02-0	90 -100 (total alloy content)	

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 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 Activator clear liquid, No Odor	Solid, 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.

*(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 01/02/89 Date Revised 08/05/03

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

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	
B. After Normal Use See Section 8		
C. Mist or Dried dust from spraying (Not formed in normal use)	30 - 50	10 mg/m ³

All Materials contained within are located on the TOSCA Inventory List

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 /No Odor	Solid 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

$$\frac{1}{2}(\text{-----})\#$$

% 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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DATE PREPARED: 11/01/85

DATE REVISED: 08/5/03

HIMS RATING Health = 1 Fire = 0 Reactivity = 0

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