

P. R. E. D. C. O.
PLUMBING RESEARCH ENGINEERING AND DEVELOPMENT COMPANY

MATERIAL SAFETY DATA SHEET

SUPPLIER'S NAME AND ADDRESS:
PREDCO
13260 18 Mile Rd
Rodney, Michigan 49342

EMERGENCY NO
231 867-2300
800 323-6188

HEALTH HAZARDS:

DATE ISSUED: 01-01-2009

HEALTH: 2
FIRE: 0
REACTIVITY: 0
FLASH POINT: > 300°F
METHOD USED: COC

PRODUCT NAME:

COMMON CODE:

Autobond Hardener

HAZARD MATERIAL DESCRIPTION, PROPER SHIPPING NAME, HAZARD CLASS:

Plastic material - paste **NOBIN,** Not Hazardous by **D.O.T.**

CHEMICAL FAMILY FORMULA
Epoxy Hardener formulated Proprietary

HAZARDOUS INGREDIENTS

CAS NO.	% (Optional)	CHEMICAL NAMES	TLV/PEL
90-72-2	proprietary	Tertiary amine derivative of phenol	- - -

KEY: --- LIMITS HAVE NOT BEEN ESTABLISHED

PHYSICAL & CHEMICAL CHARACTERISTICS

Boiling Point: No data
Vapor Pressure: Not applicable
Vapor Density (air-1): Not applicable
Solubility in water: Negligible
Specific gravity (H20-1): 1.348
Percent volatile by volume (%) = 0%
Evaporation rate:(-1): Not available
Percent solid by weight: (%): 100%
Appearance and Odor: Blue Paste with sulfur like odor.

Code No: **Autobond Hardener**

Theoretical: -- lbs/gal

Analytical: 11.23 lbs/gal

FIRE AND EXPLOSION DATA

Flammable Limits: LEL Not established UEL Not established

Extinguishing Media: Water spray, foam, dry chemical, and/or CO₂).

Special Fire Fighting Procedures: Do not enter confined fire space without full protective gear including a positive pressure, self-contained, NIOSH approved breathing apparatus. Cool fire exposed containers with water.

Unusual Fire and Explosion Hazard: Container areas exposed to intense heat or flame should be cooled with H₂O to prevent pressure build-up and/or weakening of container structure.

REACTIVITY DATA

Stability: Stable

Conditions to Avoid: Avoid high temperatures, open flames and unscheduled contact with resin systems.

**Non-compatibility:
(Materials to Avoid):** Avoid contact with strong oxidants, hot epoxy resin systems and hot amine mixtures.

Hazardous Composition Products: Carbon Dioxide (CO₂), Carbon Monoxide (CO), hydrogen sulfide (H₂S), oxides of sulfur and oxides of nitrogen (SO_x) .

Hazardous Polymerization: Will not occur.

Conditions to Avoid: Avoid mixing resin and hardener in uncontrollable quantities.

HEALTH HAZARD DATA

Chemical Listed as Carcinogen

**or Potential Carcinogen in NTP,
ARC or OSHA 1910 (Z)** This material. is, neither carcinogenic or potentially carcinogenic.

Code No: **Autobond-Hardener**

Effects of overexposure:

Skin contact: product could be moderately irritating to skin.

Eye contact: Product could be moderately irritating to eyes. Avoid skin contact and touching eyes when using this material.

Inhalation: Product could cause slight to ate irritation to the respiratory tract.

Ingestion: Considered moderately toxic.

Primary Routes of Entry:

Inhalation X Skin Contact X Other (specify) _____ .

EMERGENCY AND FIRST AID PROCEDURES:

1. **Inhalation:** Remove to fresh air if effects occur.
 2. **Eyes:** Immediately flush with generous amounts of water for at least 15 minutes. Washing within one minute is essential to achieve effectiveness. GET MEDICAL ATTENTION.
 3. **Skin:** Wash thoroughly with soap and water. Remove contaminated clothing. Get medical attention if necessary.
 4. **Ingestion:** Do not induce vomiting. Give large amounts of water or milk if available. Call a physician. Treatment based on judgment of the physician in response to reactions of the patient.
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OCCUPATIONAL EXPOSURE LIMITS

OSHA Permissible

Exposure Limit: OSHA limits have not been established for this product.

ACGIH Threshold

Limit Value: ACGIH limits have not been established for this product.

Code No: **Autobond Hardener**

SPECIAL PROTECTION INFORMATION

Respiratory Protection: If NIOSH/MSHA approved respirator with organic vapor cartridge is used, a program should be established to assure compliance.

Ventilation: Use only with adequate ventilation. Local exhaust is "recommended". Mechanical exhaust can be used as a back-up system.

Protective Gloves: Chemical resistant gloves such as rubber or PVA.

Eye Protection: NIOSH-approved safety glasses or goggles with side shield.

Other Protective Clothing or Equipment: Chemical-resistant clothing as required to minimize skin contact.

SPILL OR LEAK PROCEDURES

Steps to be Taken in Case

Material is Released or Spilled: Use cautious judgment when cleaning spills.

**Small spills may be collected with absorbent material, such as clay or sand.

**Large spills should be diked and contained with absorbent materials. Flush area with water spray to remove residue. Dispose of flush legally.

Waste Disposal Methods: Dispose in accordance with local, state and federal regulations.

SPECIAL--PRECAUTIONS

Precautions to be Taken

in Handling and Storage: Store at ambient temperatures in well ventilated area. Avoid sparks, open f and extreme heat. Store separately from amine curing agents. Protect container from physical damage.

Other Precautions: Containers, even those that have been emptied, can contain hazardous product residues. Handle in accordance with good trial pract3.ces. Avoid prolonged or repeated contact with skin. **Wash** with soap/water before eating, drinking, smoking, applying cosmetics, or using toilet facilities. Launder contaminated clothing before use.

KEY ---- Limits have not been established

N/A - Not Applicable UI - Unavailable Information

NAV - Not Available

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DATE ISSUED: 1/1/2006

FL/11

Code No: **Autobond Resin**

Theoretical: -- lbs/gal

Analytical: 12.48 lbs/gal

FIRE AND EXPLOSION DATA

Flammable Limits: LEL Not established UEL Not established

Extinguishing Media: Water fog, foam, dry chemical, CO².

Special Fire Fighting Procedures: Do not enter confined fire space without full protective gear including a positive pressure, self-contained, NIOSH approved breathing apparatus. Cool fire exposed container with water.

Unusual Fire and Explosion Hazard: Container areas exposed to intense heat or flame should be cooled with H₂O to prevent pressure build-up and/or weakening of container structure.

REACTIVITY DATA

Stability: Stable

Conditions to Avoid: Avoid high temperatures, open flames and unscheduled contact with curing agents.

Incompatibility: (Materials to Avoid) Incompatible with strong oxidizing agents, strong acids and bases, and secondary aliphatic amines.

Hazardous Decomposition Products: Carbon dioxide (CO₂) carbon monoxide(CO), aldehydes,phenolics, acids and other organic substances may be formed during high temperature degradation.

Hazardous Polymerization: Will not occur

Conditions to Avoid: Avoid mixing resin and hardener in uncontrollable quantities.

HEALTH HAZARD DATA

Chemical Listed as Carcinogen or Potential Carcinogen in NTP, IARC or OSHA 1910 (Z) This material is neither carcinogenic or potentially carcinogenic.

Code No: **Autobond Resin**

Effects of overexposure:

Skin contact: Product could be moderately irritating to skin. Avoid direct skin contact when using this material.

Eye contact: Product could be moderately irritating to the eyes. Avoid touching eyes when using this material.

Inhalation: Because of its low volatility this product is not likely to be an inhalation hazard.

Ingestion: No adverse effects anticipated by this route of exposure incidental to proper industrial handling.

Primary Routes of Entry:

Inhalation _____ Skin Contact X Other (specify) _____.

EMERGENCY AND FIRST AID PROCEDURES:

1. **Inhalation:** Remove victim to fresh air.
 2. **Eyes:** Flush eyes with generous amount of water for at least 15 minutes. GET MEDICAL ATTENTION if it appears necessary.
 3. **Skin:** Wash thoroughly with soap and water.
 4. **Ingestion:** In general, no treatment is necessary unless large quantities of product are ingested.
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OCCUPATIONAL EXPOSURE LIMITS

OSHA Permissible Exposure Limit: OSHA limits have not been established for this product.

ACGIH Threshold Limit Value: ACGIH limits have not been established for this product.

Code No: **Autobond Resin**

SPECIAL PROTECTION INFORMATION

Respiratory Protection: No respiratory protection should be needed. If however, NIOSH - approved respirators are used, a program should be established to assure compliance.

Ventilation: Local exhaust is "recommended". Mechanical exhaust can be used as a back-up system.

Protective Gloves: Chemical resistant gloves such as PVA.

Eye Protection: NIOSH approved safety glasses or goggles with side shields.

Other Protective Clothing or Equipment: Chemical-resistant clothing as required to minimize skin contact.

SPILL OR LEAK PROCEDURES

Steps to be taken in Case Material is Released or Spilled: Use cautious judgment when cleaning spills. Scrape or broom into metal containers and seal. Dispose of legally. Flush area with water spray to remove residue. Dispose of flush legally.

Waste Disposal Methods: Dispose in accordance with local, state and federal regulations.

SPECIAL PRECAUTIONS

Precautions to be Taken in Handling and Storage: Store at ambient temperatures in well ventilated area. Avoid sparks, open flames and extreme heat. Store separately from amine curing agents. Protect container from physical damage.

Other Precautions: Containers, even those that have been emptied, can contain hazardous product residues. Handle in accordance with good industrial practices. Avoid prolonged or repeated contact with skin. Wash with soap/water before eating, drinking, smoking, applying cosmetics, or using toilet facilities. Launder contaminated clothing before use.

KEY ---- Limits have not been established

N/A - Not Applicable UI - Unavailable Information

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X. SARA Title III Section 313

DATE ISSUED: 1/1/2006 This product contains the following substances subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986.
FL/11

<u>Component</u>	<u>Case Number</u>	<u>Concentration</u>
Epichlorohydrin	106-89-8	Less than 0.7 ppm