

MATERIAL SAFETY DATA SHEET

SECTION I

DATE OF PREPARATION

June 2011

PRODUCT NAME: **ICO Patch**
PRODUCT CLASS: Epoxy Resin Part A
PRODUCT TYPE: 4,4-Isopropylidenediphenol Epichlorohydrin Resin
D.O.T. CATEGORY: Chemical, NOIBN
ADDRESS: **International Coatings**
Div. of Milamar Coatings, L.L.C.
311 N.W. 122nd St. Ste. 100
Oklahoma City, OK 73114
TELEPHONE: 405-755-8448
EMERGENCY: CHEM TEL 800-255-3924

SECTION II - HAZARDOUS INGREDIENTS

Listed below are the hazardous component(s) as defined in 49 CFR 172 and 29 CFR 1910 which are present in this product and all components which appear on the hazardous substance list of any state:

None

SECTION III - PHYSICAL DATA

PHYSICAL STATE: Moderate viscosity, amber liquid
SPECIFIC GRAVITY: 1.11 at 77°F
DENSITY: 9.26 lbs/gal.
PERCENT VOLATILES 0 at 70°F

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: >200°F (Pensky Martens Closed Cup)
EXTINGUISHING DATA: Foam, Dry chemical, Carbon Dioxide (CO₂)
NOTE: Toxic fumes will be evolved when this material is involved in a fire. Self-contained breathing apparatus should be available for fire fighters. Cool fire-exposed containers with water.

SECTION V - HEALTH HAZARD DATA

EFFECTS OF OVEREXPOSURE:

ACUTE: High concentrations of vapor cause irritation of eyes and respiratory tract. May cause burns to skin and eyes. Liquid causes damage to mucous membranes if swallowed.

CHRONIC: Prolonged or repeated exposure may cause asthma and skin sensitization or other allergic response.

EMERGENCY AND FIRST AID PROCEDURES:

EYES: Will cause eye irritation. Flush with plenty of water. **GET MEDICAL ATTENTION**

SKIN: Can be absorbed through skin. It is a possible skin irritant and sensitizer. Wash thoroughly with water while removing contaminated clothing and shoes. Wash clothing before re-use and discard contaminated leather articles. **GET MEDICAL ATTENTION** if effects such as swelling or reddening occur.

INHALATION: Remove to fresh air if effects occur and administer oxygen if necessary. **GET MEDICAL ATTENTION** if effects persist.

INGESTION: **GET MEDICAL ATTENTION IMMEDIATELY** Do not induce vomiting unless directed by physician.

SECTION VI - REACTIVITY DATA

STABILITY: Stable, will react with amines.

INCOMPATIBILITY: Avoid bringing into contact with Strong acids, bases and oxidizing agents.

CONDITIONS TO AVOID: High heat, amines, strong oxidizers, acids and bases.

HAZARDOUS POLYMERIZATION: Will autopolymerize at very high temperatures only.

HAZARDOUS DECOMPOSITION PRODUCTS: Fumes, carbon dioxide, carbon monoxide, acrid smoke, acids and aldehydes.

SECTION VII - SPILL OR LEAK PROCEDURE

IF MATERIAL IS SPILLED: Remove all possible sources of ignition or polymerization (see Section 4 & 5). Avoid contact with material. Persons not wearing appropriate protective equipment (see below) should be excluded from the area of spill until clean-up is complete. Stop spill at source, dike area to prevent spreading, pump liquid to salvage tank. Remaining liquid may be taken up on clay, diatomaceous earth or other absorbent and shoveled into disposal containers.

WASTE DISPOSAL METHOD: Dispose of as hazardous waste in accordance with Federal, State and Local regulations.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION: NIOSH approved respiratory protection required in the absence of proper environmental control. For emergencies, a self-contained breathing apparatus, or a full-face respirator is recommended.

VENTILATION: Breathing of vapors must be avoided. Ventilation must be sufficient to control vapors. This material should be confined as far as possible within sealed or covered equipment in which case normal ventilation should be adequate. Special (local) ventilation will be needed in areas where vapors are expected to be vented

HAND PROTECTION: Impervious gloves, neoprene or rubber.

EYE PROTECTION: Splash proof goggles or safety spectacles with side shields.

OTHER PROTECTIVE EQUIPMENT: Clean, body-covering clothing. Further safety equipment (apron, footwear, etc.) should be used as necessary to prevent contact with material.

SECTION IX - SPECIAL PRECAUTIONS

1. Prevent all skin and eye contact.
2. Avoid breathing vapors.
3. Re-seal part used containers.
4. Ensure that all containers are properly labeled to prevent accidental ingestion.
5. Wash with soap and water before eating, drinking, smoking or using toilet facilities.
6. Observe conditions of good industrial hygiene and safe working practice.

THE INFORMATION HEREIN RELATES TO THE PRODUCT NAMED AND IS BASED UPON INFORMATION INTERNATIONAL COATINGS CONSIDERS TO BE ACCURATE. NO WARRANTY EXPRESSED OR IMPLIED IS INTENDED.

MATERIAL SAFETY DATA SHEET

SECTION I

DATE OF PREPARATION

June 2011

PRODUCT NAME: **ICO Patch**
PRODUCT CLASS: Epoxy Resin Hardener, Part B
PRODUCT TYPE: Modified diamines
D.O.T. CATEGORY: UN 2735 Amines, Liquids Corrosive NOS (1,3-Cyclohexanedimethanamine, xylenediamine) 8 PG III
ADDRESS: **International Coatings**
Div. of Milamar Coatings, L.L.C.
311 N.W. 122nd St. Ste. 100
Oklahoma City, OK 73114
TELEPHONE: 405-755-8448
EMERGENCY: CHEM TEL 800-255-3924

SECTION II - HAZARDOUS INGREDIENTS

Listed below are the hazardous component(s) as defined in 49 CFR 172 and 29 CFR 1910 which are present in this product and all components which appear on the hazardous substance list of any state.

Exposure Limits

Nonylphenol:	CASRN	84852-15-3	15%	N/A
Aminoethylpiperazine:	CASRN	140-31-8	10%	N/A
Benzyl Alcohol:	CASRN	100-51-6	25%	N/A

SECTION III - PHYSICAL DATA

APPEARANCE: Low viscosity, amber color
ODOR: Amine
SPECIFIC GRAVITY: 1.005
DENSITY: 14lbs/gal, 8.55
VAPOR PRESSURE: Less than 1mm Hg @ 68° F
PERCENT VOLATILES: 0 AT 70° F

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: >200°F (Pensky Martens Closed Cup)
LFL: ND
UFL: ND
EXTINGUISHING MEDIA: Water Fog, Alcohol Foam, Dry Chemicals, Carbon Dioxide (CO₂),
SPECIAL FIRE FIGHTING PROCEDURES: When fire fighting, wear full protective equipment including self-contained breathing apparatus.
NOTE: Will burn under right conditions of heat and oxygen supply.

SECTION V - HEALTH HAZARD DATA

PERMISSIBLE EXPOSURE LEVEL None Established

EFFECTS OF OVER EXPOSURE:

INHALATION May cause nasal irritation, central nervous system depression or lung injury
EYES This product can cause chemical burns to eyes. Eye damage may be irreversible.
SKIN May be corrosive or highly irritating to the skin. Repeated contact may cause sensitization and/or dermatitis.

FIRST AID:

EYES Flush with water for at least 15 minutes. **GET MEDICAL ATTENTION**
SKIN Wash thoroughly with water. Remove contaminated clothing and shoes. Wash clothing before re-use. Get medical attention if effects such a swelling or reddening occur.
INHALATION Remove to fresh air if effects occur and administer oxygen if necessary. **GET MEDICAL ATTENTION**
INGESTION **GET MEDICAL ATTENTION IMMEDIATELY. DO NOT** induce vomiting unless directed by a physician.

SECTION VI - REACTIVITY DATA

STABILITY Product is stable under normal conditions

INCOMPATIBILITY (Materials to Avoid): Avoid bringing into contact with strong oxidizing agents and strong Lewis or Mineral acids, bases

HAZARDOUS DECOMPOSITION PRODUCTS:

CO (Carbon Monoxide)

CO₂ (Carbon Dioxide)

Acids

Aldehydes

SECTION VII - SPILL OR LEAK PROCEDURE

STEPS TO TAKE IF SPILLED:

Using adequate protective equipment, add dry material to absorb spill (if large spill, first dike to contain). Pick up and containerize. Flush area with dilute (5%) acetic acid. Collect rinsate for sewer disposal.

WASTE DISPOSAL:

Product is classified as "corrosive" and as such must be disposed of as a hazardous waste according to Federal, State and Local regulations

SECTION VIII - SPECIAL PROTECTION INFORMATION

VENTILATION REQUIREMENTS: Local, except in confined spaces, e.g., tanks, in which case proper respiratory equipment (see below) is required.

PERSONAL PROTECTIVE EQUIPMENT RECOMMENDED FOR NORMAL USE CONDITIONS

EYE PROTECTION: Chemical goggles

SKIN PROTECTION: Rubber or plastic gloves

RESPIRATORY PROTECTION: Respirator with organic vapor cartridge N/A with local exhaust.

SECTION IX - SPECIAL PRECAUTIONS

1. Prevent all eye and skin contact
2. Corrosive – may cause severe skin reaction
3. Reseal partially used containers and store in cool dry place away from strong oxidizing agents.
4. Observe conditions of good industrial hygiene and safe working practices.
5. Wash hands before eating, drinking or smoking.

SECTION X - TRANSPORTATION

DOT PROPER SHIPPING NAME: Amines, Liquids Corrosive NOS (1,3-Cyclohexanedimethanamine, xylylenediamine)

DOT HAZARD OR CLASSIFICATION 8

IDENTIFICATION NUMBER UN 2735

PACKAGING GROUP: III

LABELS REQUIRED: Corrosive

SECTION XI – REGULATORY INFORMATION

WHMSIS CLASSIFICATION Class E, Corrosive

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