

MATERIAL SAFETY DATA SHEET

SECTION I

DATE OF PREPARATION

June 2011

PRODUCT NAME: **ICO - Guard Liner**
PRODUCT CLASS: Epoxy Resin, Part A
PRODUCT TYPE: 4,4'-Isopropylidenediphenol Epichlorohydrin Resin
D.O.T. CATEGORY: Chemical, NOIBN
ADDRESS: **International Coatings**
2925 Lucy Lane
Franklin Park, IL 60131
TELEPHONE: 847-451-0279
EMERGENCY: 800-535-5053

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: 1-14 at 77°F.
DENSITY: 9.5 lbs/gal
PERCENT VOLATILES: 0 at 70 °F

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: 420°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: May cause burns to skin and eyes. High concentration of vapors can cause severe irritation of eyes and respiratory tract. 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: Immediately flush with large amounts of water for at least 15 minutes lifting upper and lower lids occasionally. **GET IMMEDIATE MEDICAL ATTENTION.** If a physician is not immediately available, continue flushing with water.

SKIN: Immediately flush skin with water for at least 15 minutes while removing contaminated clothing and shoes. **GET MEDICAL ATTENTION** if swelling or reddening occurs.

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

INGESTION: **DO NOT INDUCE VOMITING.** Vomiting will cause further damage to the throat. Dilute by giving water or milk to drink if victim is conscious. **GET MEDICAL ATTENTION IMMEDIATELY.**

SECTION VI - REACTIVITY DATA

STABILITY: Stable under normal storage conditions.
INCOMPATIBILITY: Avoid contact with strong oxidizing agents, mineral acids (e.g. H₂SO₄, HCL), and epoxy resins under uncontrolled conditions.

HAZARDOUS DECOMPOSITION PRODUCTS:

CO (Carbon Monoxide) CO₂ (Carbon Dioxide) NO_x (Oxides of Nitrogen)

SECTION VII - SPILL OR LEAK PROCEDURE

IF MATERIAL IS SPILLED: 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: This product if disposed as shipped is not a hazardous waste as specified under 40 CFR 261. Controlled incineration or buried landfill disposal should be in accordance with all Federal, State & 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: Local, except if applied in enclosed space, in which case proper respiratory equipment (see above) must be worn.

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 Guard Liner**
PRODUCT CLASS: Epoxy Resin Hardener, Part B
PRODUCT TYPE: Cycloaliphatic Amine Solution
D.O.T. CATEGORY: UN 2289 Isophoronediamine 8 PG III
ADDRESS: **International Coatings**
2925 Lucy Lane
Franklin Park, IL 60131
TELEPHONE: 847-451-0279
EMERGENCY: 800-535-5053

SECTION II - HAZARDOUS INGREDIENTS

NFPA HAZARD RATING: Health 3, Flammability 1, Reactivity 1

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.

Isophoronediamine:	Corrosive	CASRN 2855132	30% maximum
Amine adduct:	Corrosive	CASRN 68609085	26% maximum
Benzyl Alcohol:	Irritant	CASRN 00100516	44 maximum

SECTION III - PHYSICAL DATA

APPEARANCE: Clear yellow liquid
ODOR: Ammonia like
BOILING POINT: 195°C
MELTING POINT: ND
VAPOR DENSITY: ND
WATER MISCIBILITY: Negligible
PERCENT VOLATILES: 0 AT 70°F
SPECIFIC GRAVITY: 1.020
pH: 10-11

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: >200°F (Pensky Martens Closed Cup)
LFL: ND
UFL: ND
EXTINGUISHING MEDIA: Foam, Dry Chemicals, Carbon Dioxide (CO₂), Water
UNUSUAL FIRE OR EXPLOSION HAZARDS (Conditions to avoid): May produce hazardous fumes or hazardous decomposition products.
SPECIAL FIRE FIGHTING PROCEDURES: When fire fighting, wear full protective equipment including self-contained breathing apparatus.

SECTION V - HEALTH HAZARD DATA

Test Type	Result	Type	Animal Species	Hazard Rank
Dermal Toxicity	>2.0	G/KG EST LD50	Rabbit	Slight
DOT Corrosivity	POS	-	Rabbit	-
Eye Irritation	<72	0 - 110 Range	Rabbit	Severe
Oral Toxicity	>0.5	G/KG EST LD 50	Rat	Moderate
Skin Irritation	4.96	0 - 8 Range	Rabbit	Severe
LD(50)	N/D			

FIRST AID RECOMMENDATIONS

SKIN AND EYE CONTACT: May be corrosive or highly irritating to the skin. Repeated contact may cause sensitization and/or dermatitis in some people.

FIRST AID: Immediately flush with water for at least 15 minutes while removing contaminated clothing. **Call a physician.**

INHALATION: May cause irritation to upper respiratory tract. Avoid prolonged or repeated inhalation.

FIRST AID: Move to fresh air. If symptoms persist, consult a physician.

ORAL INGESTION: **DANGER!** Do not take internally. May cause gastrointestinal irritation or ulceration. May cause burns to mouth or throat.

FIRST AID: **DO NOT induce vomiting.** Give a large quantity of milk or water. Do not give fluids to an unconscious person. Call a physician.

OTHER: No carcinogenicity, mutagenicity or teratogenicity effects are known. No effects of chronic exposure or target organ effects are known. No exposure limits have been established for this product as formulated.

SECTION VI - REACTIVITY DATA

STABILITY: Stable under normal storage conditions.

INCOMPATIBILITY (Materials to Avoid): Strong acids, bases and oxidizers

Hazardous polymerization will not occur.

SECTION VII - SPILL OR LEAK PROCEDURE

STEPS TO TAKE IF SPILLED:

Using recommended 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 or disposal.

WASTE DISPOSAL:

This product, if disposed as shipped, meets EPA criteria of a hazardous waste as specified in 40 CFR 261 on the basis of corrosivity. Dispose of in a licensed hazardous waste facility in accordance with applicable laws.

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: Full face shield and 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 material; can cause skin sensitization
3. Re-seal partially used containers. Store in a cool, dry place
4. Observe conditions of good industrial hygiene and safe working practice
5. Wash with soap and water before eating, drinking, smoking or using lavatory

SECTION X - TRANSPORTATION

DOT PROPER SHIPPING NAME: Isophoronediamine

DOT HAZARD OR CLASSIFICATION: 8

IDENTIFICATION NUMBER: UN 2289

PACKAGING GROUP: III

LABELS REQUIRED: Corrosive

SECTION XI - REGULATORY INFORMATION

WHMSIS CLASSIFICATION: Class E, Corrosive

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.