

MATERIAL SAFETY DATA SHEET

SECTION I

Date of Preparation
June 2011

PRODUCT NAME: **ICO Gel FC**
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: 1.18 at 77°F
DENSITY: 9.9 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: High concentration of vapor causes irritation of eyes and respiratory tract.
CHRONIC: Prolonged or repeated exposure may cause asthma and skin sensitization or other allergic reactions.

EMERGENCY AND FIRST AID PROCEDURES:

EYES: Flush with water for at least 15 minutes, holding eyelid open. **GET MEDICAL ATTENTION.**
SKIN: 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:** Induce vomiting immediately by depressing back

SECTION VI - REACTIVITY DATA

STABILITY: Stable under normal storage conditions.
INCOMPATIBILITY: Avoid bringing into contact with strong oxidizing agents, and strong Lewis or mineral acids.
HAZARDOUS DECOMPOSITION PRODUCTS:
CO (Carbon Monoxide) CO₂(Carbon Dioxide) Acids Aldehydes

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 40CFR 261. Controlled incineration or buried landfill should be in accordance with all Federal, State and local regulations.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION: NIOSH approved respiratory protection required in the absence of Local ventilation.

VENTILATION: Local

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 Gel FC**
PRODUCT CLASS: Epoxy Resin Hardener, Part B
PRODUCT TYPE: Modified Amines
D.O.T. CATEGORY: UN 2815 N-Aminoethylpiperazine 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

<u>Ingredient</u>	<u>CAS#</u>	<u>Maximum Content</u>	TLV	PEL	<u>Exposure Limits</u>	
					LD 50/Oral	LD 50/Dermal
Polyoxypropylenei-diamine	9046-10-0	10%	NE	NE	1.6/kg	>60mg/kg
N-Aminoethylpiperazine	140-31-8	40%	NE	NE	>2.3/kg	<2g/kg
1.2 - Cyclohexanediamine	694-83-7	5%	NE	NE	2.3/kg	NE

SECTION III - PHYSICAL DATA

PHYSICAL STATE: Low Viscosity, amber color
SPECIFIC GRAVITY: 1.03 at 77 °F
DENSITY: 8.5 lbs./gal at 77 °F
ODOR: Slight ammoniated
VAPOR PRESSURE: Less than 1 mm Hg @ 68 °F
PERCENT VOLATILES: 0 at 70 °F

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: >200 °F (Setaflash Closed Cup).
LFL: No Data
UFL: No Data
EXTINGUISHING MEDIA: Water fog, Alcohol foam, CO₂, Dry Chemical
SPECIAL FIRE FIGHTING PROCEDURES: Use a positive pressure, self-contained breathing apparatus. Wear full protection coating.
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 as 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 physician.

SECTION VI - REACTIVITY DATA

STABILITY: Stable under normal storage conditions.

INCOMPATIBILITY Avoid bringing into contact with strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS: Fumes, nitrogenoxides, carbon monoxide, ocrid smoke

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 its corrosivity. Consult local or state authorities for proper disposal methods.

SECTION VIII - SPECIAL PROTECTION INFORMATION

VENTILATION REQUIREMENTS: Local, except if applied in confined spaces where adequate respiratory protection is required.

PERSONAL PROTECTIVE EQUIPMENT RECOMMENDED FOR NORMAL USE CONDITIONS:

EYE PROTECTION: Chemical goggles

SKIN PROTECTION: Rubber or plastic gloves

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

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:

Keep container tightly closed when not in use. Store in a dry location

SECTION IX - TRANSPORTATION

DOT PROPER SHIPPING NAME: N-Aminoethylpiperazine

DOT HAZARD CLASSIFICATION OR DIVISION: 8

IDENTIFICATION NUMBER: UN 2815

PACKAGING GROUP: III

LABELS REQUIRED: Corrosive

SECTION X - REGULATORY INFORMATION

WHMSIS CLASSIFICATION – Class E – Corrosive

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