MATERIAL SAFETY DATA SHEET

SECTION I

DATE OF PREPARATION

July 2012

PRODUCT NAME: Iron Guard 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. Suite 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: 1-14 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) NOx (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

July 2012

PRODUCT NAME: Iron Guard FC

PRODUCT CLASS: Epoxy Resin Hardener, Part B

PRODUCT TYPE: Modified Polyamine

D.O.T. CATEGORY: UN 1760 Corrosive liquids N.O.S. (Modified Polyamines) 8 PG III

ADDRESS: International Coatings

Div. of Milamar Coatings, L.L.C. 311 N.W. 122nd St. Suite 100 Oklahoma City, OK 73114

TELEPHONE: 405-755-8448

EMERGENCY: CHEM TEL 800-255-3924

SECTION II - HAZARDOUS INGREDIENTS

NFPA RATINGS: Health, 3; Flammability, 1; Reactivity, 0; Exposure limits
Nonylphenol CASRN 84852153 55.0 +/- 5 N/A

Irritant to eyes and skin

Metaxylenediamine CASRN 1477550 35.00 +/- 5 PEL 0.1mg/m3 (TWA)

Corrosive to skin. Irritant to eyes and skin 0.1mg/m3 (ceiling)

Amine Adduct CASRN 68738772 10% +/- 2 N/A

Corrosive

SECTION III - PHYSICAL DATA

APPERANCE: Clear to Light Yellow ODOR: Ammonia-like

BOILING POINT:

MELTING POINT:

SPECIFIC GRAVITY

VAPOR DENSITY:

PERCENT VOLATILES:

WATER MISCIBILTY:

ND

0 at 70°F.

Slight - .1 to 10%

pH: 10-11

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: >200° F (Setaflash Closed Cup).

LOWER FLAMMABLE LIMIT: N/D UPPER FLAMMABLE LIMIT: N/D

EXTINGUISHING MEDIA: Water, Foam, Dry Chemical, Carbon Dioxide (CO₂).

UNUSUAL FIRE OR EXPLOSION HAZARDS (Conditions to avoid): May produce hazardous fumes or hazardous decomposition products.

HAZARDOUS DECMPOSITION PRODUCTS: Fumes, NOx, CO and Acrid smoke

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 LC(50) N/D

LC(50) N/D LC(50) N/D

SKIN AND EYE CONTACT: Causes severe skin and eye irritation or burns. May cause permanent visual impairment. Wear protective clothing and chemical goggles. May cause skin sensitization. Avoid contact.

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

INHALATION: Excessive inhalation can cause respiratory irritation.

FIRST AID: Move to fresh air. If breathing is labored, administer oxygen. If breathing has stopped, administer artificial respiration and seek emergency medical assistance.

Page 2 Iron Guard FC, Part B

of 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

INCOMPATIBLE MATERIALS (Materials to avoid): Oxidizers, high heat, amines and strong acid bases Product is stable under normal conditions.

HAZARDOUS DECOMPOSITION PRODUCTS: See Section IV

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

SECTION VIII - SPECIAL PROTECTION INFORMATION

VENTILATION REQUIREMENTS: Local,

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

Do not handle or use product until safety precautions recommended in this data sheet have been read and fully understood.

SECTION X - TRANSPORTATION

DOT PROPER SHIPPING NAME: Corrosive Liquids, N.O.S. (Modified Polyamines)

DOT HAZARD CLASSIFICATION OR DIVISION: 8
IDENTIFICATION NUMBER: UN 1760
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.