

# MATERIAL SAFETY DATA SHEET

## SECTION I

DATE OF PREPARATION

June 2011

**PRODUCT NAME:** **ICO - Guard 51**  
**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

**NFPA HAZARD RATINGS:** Health 1, Flammability 1, Reactivity 0

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**

Reaction product of epichlorohydrin and bisphenol A - CAS# 025085-99-8 >75%

## SECTION III - PHYSICAL DATA

**PHYSICAL STATE:** Moderate viscosity, amber liquid.  
**SPECIFIC GRAVITY:** 1-14 at 77°F.  
**DENSITY:** 9.5 lbs/gal  
**SOLUBILITY:** Negligible  
**pH:** NA  
**PERCENT VOLATILES:** 0 at 70 °F

## SECTION IV - FIRE AND EXPLOSION HAZARD DATA

**FLASH POINT:** 420°F (Pensky Martens Closed Cup)

### FLAMMABILITY LIMITS

**FL:** NA

**UFL:** NA

**EXTINGUISHING DATA:** Foam, Dry Chemical, Carbon Dioxide (CO<sub>2</sub>)

**FIRE FIGHTING INSTRUCTIONS:** Use water spray to cool fire-exposed containers until fire is out. Wear positive-pressure, self-contained breathing apparatus and full protective equipment, as decomposition products are hazardous

**HAZARDOUS DECOMPOSITION PRODUCTS:** Mainly phenolics, CO and H<sub>2</sub>O

## SECTION V - HEALTH HAZARD DATA

### EFFECTS OF OVEREXPOSURE:

**EYES:** May cause temporary eye irritation. Corneal injury unlikely

**SKIN:** Prolonged exposure not likely to cause significant skin irritation. Repeated exposure may cause skin irritation and has caused skin reactions in humans. A single prolonged exposure unlikely to result in material being absorbed into skin.

**INGESTION:** Single dose oral toxicity extremely low. No hazards anticipated from swallowing small amounts incidental to normal handling.

**INHALATION:** Vapors are unlikely due to physical properties

### 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:** Bases, acids, amines, oxidizing agents

**HAZARDOUS DECOMPOSITION PRODUCTS:** Refer to Section IV

**CONDITIONS TO AVOID:** Excess exposure at temperatures above 60C over long periods degrades material

### 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. Re-seal part used containers.
3. Ensure that **all** containers are properly labeled to prevent accidental ingestion.
4. Wash with soap and water before eating, drinking, smoking or using toilet facilities.
5. Observe conditions of good industrial hygiene and safe working practice.

### SECTION X - REGULATORY INFORMATION

**WHMSIS INFORMATION: D2B - SKIN SENSITIZER**

**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 51**  
**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 RATINGS:** 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% max.  
**Amine Adduct Corrosive:** CASRN 68609085 26% max.  
**Benzyl Alcohol Irritant:** CASRN 00100516 44.00 max.

## SECTION III - PHYSICAL DATA

**APPEARANCE:** Clear Yellow Liquid  
**ODOR:** Ammonia-like  
**PHYSICAL PROPERTIES**  
**BOILING POINT:** 195 °C  
**MELTING POINT:** N/D  
**SPECIFIC GRAVITY:** 1.020  
**VAPOR DENSITY:** N/D  
**PERCENT VOLATILES:** 0 at 70°F  
**WATER MISCIBILITY:** Negligible - < 0.1%  
**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:** Foam, Dry Chemical, Carbon Dioxide (CO<sub>2</sub>), Water  
**UNUSUAL FIRE OR EXPLOSION HAZARDS (conditions to avoid):** May produce hazardous fumes or hazardous decomposition products.  
**HAZARDOUS DECOMPOSITION PRODUCTS:** NO<sub>x</sub>, CO, Nitric Acid fumes  
**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	>.5	G/KG EST LD50	Rat	Moderate
Skin Irritation	4.96	0-8 Range	Rabbit	Severe
LC(50) - N/D				

## FIRST AID RECOMMENDATIONS

- SKIN AND EYE CONTACT:** **Danger!** Causes severe skin and eye irritation or burns. May cause permanent visual impairment. May cause skin sensitization. Avoid contact. Wear protective clothing and chemical goggles.
- FIRST AID:** Immediately flush with water for at least 15 minutes while removing contaminated clothing. **Call a physician.**
- INHALATION:** **Caution!** 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

**INCOMPATIBLE MATERIALS (Materials to avoid):** Strong acids, bases and oxidizers

Product is stable under normal conditions.

Hazardous polymerization will not occur.

## SECTION VII - SPILL OR LEAK PROCEDURE

**STEPS TO BE TAKEN 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. 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 materials; can cause skin sensitization
3. Reseal partially used containers. Store in cool, dry place.
4. Observe conditions of good hygiene and safe working practices
5. Wash with soap and water before eating, drinking, smoking or using the lavatory.

## SECTION X - TRANSPORTATION

- DOT PROPER SHIPPING NAME:** Isophoronediamine
- DOT HAZARD CLASSIFICATION:** 8
- IDENTIFICATION NUMBER:** UN 2289
- PACKAGING GROUP:** III
- LABELS REQUIRED:** Corrosive

## SECTION XI - REGULATORY INFORMATION

**WHMSIS CLASSIFICATION:** Class E, Corrosive

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