MATERIAL SAFETY DATA SHEET

SECTION I

DATE OF PREPARATION
June 2011

PRODUCT NAME: **ICO Lastic OH, Part A**
PRODUCT CLASS: Urethane Prepolymer
PRODUCT TYPE: Blocked Polyurethane Prepolymer
D.O.T. CATEGORY: Chemical, NOIBN, non-Regulated
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

NFPA Rating: 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
Formula is considered trade secret

SECTION III - PHYSICAL DATA

PHYSICAL STATE:	Viscous liquid	**ODOR:**	Slightly Phenolic
SPECIFIC GRAVITY:	1.13 at 77°F.	**DENSITY:**	9.4 lbs/gal
pH:	NA	**SOLUBILITY:**	Negligible
PERCENT VOLATILES:	0 at 70° F		

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: 400° F (Pensky Martens Closed Cup)
FLAMMABILITY LIMITS: LFL:
EXTINGUISHING DATA: Foam, Dry Chemical, Carbon Dioxide (CO_2); Water spray for large fires.
NOTE: Full emergency equipment with self-contained breathing apparatus and full protective clothing (such as rubber gloves, boots, bands around legs, arms and waist) should be worn by fire fighters. No skin surface should be exposed. During a fire, toluene diisocyanate (TDI) vapors and other irritating, highly toxic gases may be generated by thermal decomposition or combustion. (See Section VIII). At temperatures greater than 350°F (177 C) TDI forms carbodiimides with the release of CO_2 which can cause pressure build-up in closed containers. Explosive rupture is possible. Therefore, use cold water to cool fire-exposed containers.

SECTION V - HEALTH HAZARD DATA

EFFECTS OF OVEREXPOSURE:
ACUTE INHALATION: Inhalation of spray mists may cause respiratory irritation as a result of exposure to branched 4-nonyl-Phenol. Symptoms may include a burning sensation in the nose and throat and possibly chest pain and/or chest tightness.
ACUTE SKIN CONTACT: Prolonged skin contact may result in skin irritation. Symptoms may be reddening, swelling, rash, scaling and blistering.
AACUTE EYE CONTACT: Eye irritation; symptoms are pain, tearing, reddening and swelling.
CHRONIC: None reported.
CARCINOGENICITY: None Reported.
EMERGENCY AND FIRST AID PROCEDURES:
EYES: Flush with clean, lukewarm water (low pressure) for at least 15 minutes holding eyelids open all the time, and obtain medical attention. Refer individual to an ophthalmologist for immediate follow-up.
SKIN: Remove contaminated clothing immediately. Wash affected areas thoroughly with soap and water for at least 15 minutes. Wash contaminated clothing thoroughly before reuse. Wash contaminated shoes before reuse. For severe exposures, get under safety shower after removing clothing, get medical attention, and consult physician.

INHALATION: Move to an area free from risk of further exposure. Administer oxygen or artificial respiration as needed. Obtain medical attention. Consult physician

.**INGESTION:** Do not induce vomiting. Give 250 ml of milk or water to drink. **DO NOT GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON** Consult physician.

NOTE TO PHYSICIAN: Eyes: Stain for evidence of corneal injury. If cornea is burned, instill antibiotic steroid preparation frequently. Workplace vapors have produced reversible corneal epithelial edema impairing vision. Skin: Treat as contact dermatitis. Respiratory: Treatment is essentially symptomatic.

SECTION VI - REACTIVITY DATA

STABILITY: This is a stable material.

HAZARDOUS POLYMERIZATION: Will not occur.

INCOMPATIBILITY: Certain amines may cause unblocking at lower temperatures.

INSTABILITY CONDITIONS: Blocking agent and toluene diisocyanate are released a temperatures above248˚F (120˚C).

DECOMPOSITION PRODUCTS by fire: CO_2, CO, Phenol derivatives, low molecular weight organic fragments, TDI.

SECTION VII - SPILL OR LEAK PROCEDURE

SPILL OR LEAK PROCEDURES: Equip clean-up crew with appropriate protective equipment (See Employee Protection Recommendations). Dike or impound spilled material and control further spillage if feasible. Cover spill with sawdust, vermiculite, Fuller's earth or other absorbent material. Collect material in open containers.

WASTE DISPOSAL METHOD: Waste material must be disposed of in accordance with federal, state and local environmental control regulations. Empty containers must be handled with care due to product residue. **DO NOT HEAT OR CUT EMPTY CONTAINER WITH ELECTRIC OR GAS TORCH.** (See sections IV and VIII). Vapors and gases may be highly toxic.

SECTION VIII - SPECIAL PROTECTION INFORMATION

EYE PROTECTION REQUIREMENTS Chemical safety goggles or safety glasses with side shields

SKIN PROTECTION REQUIREMENTS Permeation resistant gloves (butyl rubber). Cover as much of the exposed skin area as possible with appropriate clothing. If skin creams are used, keep the area covered only by the cream to a minimum.

RESPIRATOR REQUIREMENTS: None required under normal conditions of use. Tests have shown that the recommended room temperature, amine-driver curing reaction does not release airborne toluene diisocyanate (TDI). However, if a fire or a process upset occurs resulting in heating above 248˚F (120˚C), workers must wear positive-pressure, air-supplied respirators since airborne TDI may be generated under these conditions. You must consult the MSDS for TDI (Mondur TD-80) which is available by contacting your Mobay sales representative.

VENTILATION REQUIREMENTS: Local

EXPOSURE GUIDELINES:none established

SECTION IX - SPECIAL PRECAUTIONS

STORAGE TEMPERATURE (MIN/MAX) 32˚F (0˚C)/122˚F (50˚C)

SHELF LIFE: 12 months at 77˚F (25˚C)

SPECIAL SENSITIVITY: Heat (See Reactivity Data)

HANDLING/STORAGE PRECAUTIONS: Store in tightly closed containers to prevent moisture contamination. Do not reseal if contamination is suspected. Avoid contact with skin and eyes. Do not breathe aerosols or vapors. Warning properties (irritation of the eyes, nose and throat or odor) are not adequate to prevent chronic overexposure from inhalation. Employee education and training in the safe use and handling of this compound are required under the OSHA Hazard Communication Standard.

SECTION X – REGULATORY INFORMATION

WHMSIS CLASSIFICATION: NONE REGULATED

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 Lastic OH Part B**
PRODUCT CLASS: Epoxy Resin Hardener, Part B
PRODUCT TYPE: Cycloaliphatic Amines
D.O.T. CATEGORY: UN 2922 Corrosive liquid, toxic N.O.S. (Cyclohexanamine, 4,4'-Methylenebis{2-Methyl-8(6.1) 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

NFPA HAZARD RATING: Health 3, Flammability 1, Reactivity 0, Other: Corrosive
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:
Dimethyldicykan CAS# 6864-37-5>75%

SECTION III - PHYSICAL DATA

APPERANCE: Clear Amber
ODOR: Slightly ammoniacal
PHYSICAL PROPERTIES
BOILING POINT: 200°C
MELTING POINT: ND
SPECIFIC GRAVITY: 0.95
VAPOR PRESSURE: < 1 mm Hg
PERCENT VOLATILES: 0 at 70°F
WATER MISCIBILTY: 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 (CO_2).
UNUSUAL FIIREOR EXPLOSION HAZARDS (Conditions to avoid): May produce hazardous fumes or hazardous decomposition products.
SPECIAL FIRE FIGHTING PROCEUDRES: When fire fighting, wear full protective equipment including self contained breathing apparatus.

SECTION V - HEALTH HAZARD DATA

Rat:	Oral LD50	550 mg/kg
Rabbit:	Dermal LD50	>200<400 mg/kg
Rabbit:	Skin	Severely irritating, Corrosive
Rabbit:	Eyes	Severely irritating, Corrosive
Rat:	Inhalation	1 out of 12 animals died after an

EFFECTS OF OVEREXPOSURE:
CORROSIVE: Causes severe burns on contact with skin or eyes. May cause permanent eye injury. If inhaled, may cause moderate to severe respiratory irritation leading to choking, or possible tissue damage. If ingested, gastric irritation, nausea, vomiting, pain, and possible perforation of the GI tract may result. This material is absorbed through the skin in toxic amounts. In animal studies, repeated oral administration reportedly resulted in decreased boy weight gain, and loss of muscular strength. Other studies indicate that kidney injury may result. This compound is suspected of causing a skin disease characterized by hardening and shrinking of the skin.

FIRST AID PROCEDURES:

EYES: Immediately wash eyes with running water for 15 minutes. Get immediate medical attention.

SKIN: Wash affected areas with water while removing contaminated clothing. Get immediate medical attention. Launder contaminated clothing before reuse.

INGESTION: If swallowed, ***DO NOT INDUCE VOMITING*** Dilute with water or milk and call a physician immediately. Never give fluids or induce vomiting if the victim is unconscious or having convulsions.

INHALATION: Move to fresh air. Aid in breathing, if necessary, and get immediate medical attention.

SECTION VI - REACTIVITY DATA

Incompatible materials (materials to avoid): Avoid contact with nitrocellulose or chlorinated hydrocarbons as violent decomposition reaction can occur.

HAZARDOUS PRODUCTS: CO, CO_2, and NOx

Product is stable under normal conditions.

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. This material is not regulated under RCRA or CERCLA.

WASTE DISPOSAL This product if disposed as shipped meets EPA criteria of a hazardous waste as specified in 40CFR 261 on the basis of its corrosivity and must be disposed of in a hazardous waste facility in accordance with applicable laws.

SECTION VIII - SPECIAL PROTECTION INFORMATION

VENTILATION REQUIREMENTS: Use local exhaust to control vapors/mist.

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 liquid, toxic N.O.S. (Cyclohexanamine, 4,4'-Methylenebis{2-Methyl- 8(6.1) PG III
DOT HAZARD CLASSIFICATION OR DIVISION:	8 (6.1)
IDENTIFICATION NUMBER:	UN 2922
PACKAGING GROUP:	I
LABELS REQUIRED:	Corrosive, Toxic

SECTION X – REGULATORY INFORMATION

WHMSIS CLASSIFICATION: Class E, Corrosive, Flammable Liquid

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.