

# MATERIAL SAFETY DATA SHEET

## SECTION I

DATE OF PREPARATION

June 2011

**PRODUCT NAME:** ICO Ure Guard Liner, Part A  
**PRODUCT CLASS** Polyurethane Flooring  
**PRODUCT TYPE** Polyalcohol Emulsion  
**D.O.T. CATEGORY:** Not Regulated  
**HMIS RATING:** Health - 2, Flammability - 1, Reactivity - 0  
**ADDRESS:** International Coatings  
Div. of Milamar Coatings, L.L.C.  
311 N.W. 122<sup>nd</sup> 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 29CFR 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:** Colorless  
**SPECIFIC GRAVITY:** 1.0 g/cm<sup>3</sup> @ 68° F  
**DENSITY:** 8.3 lbs/gal @ 68° F  
**ODOR:** Very slight  
**VAPOR PRESSURE:** No Data Available  
**PERCENT VOLATILES:** 0%

## SECTION IV - FIRE AND EXPLOSION HAZARD DATA

**FLASH POINT:** Not applicable - water based product  
**LFL:** None Determined  
**UFL:** None Determined  
**Extinguishing Media:** CO<sub>2</sub>, Dry Chemical, Foam, Water Spray  
**SPECIAL FIRE FIGHTING PROCEDURES:** Fire fighters should be equipped with self-contained breathing apparatus to protect against potentially toxic and irritating fumes. Use cold water spray to cool fire-exposed containers.

## SECTION V - HEALTH HAZARD DATA

**PERMISSIBLE EXPOSURE LEVEL** none established  
**EFFECTS OF OVER EXPOSURE**  
**INHALATION** May cause respiratory irritation.  
**EYES** Eye contact may cause irritation.  
**SKIN** May be moderately irritating to the skin.  
**INGESTION** Not expected to be harmful if swallowed.  
**FIRST AID**  
**EYES** Flush with water for at least 15 minutes. Use fingers to ensure that eyelids are separated and that the eye is being irrigated.  
**SKIN** Wash thoroughly with soap and water. Remove contaminated clothing and shoes. Wash clothing before re-use. Get medical attention if irritation develops.  
**INHALATION** If inhaled, remove to fresh air. Get medical attention if irritation develops.  
**INGESTION** Do not induce vomiting. Get medical attention.

## SECTION VI - REACTIVITY DATA

**STABILITY:** Stable under normal storage conditions.  
**INCOMPATIBILITY:** Avoid bringing into contact with oxidizing agents, reducing agents, acids, and bases.  
**HAZARDOUS DECOMPOSITION PRODUCTS:** CO, CO<sub>2</sub>, Nitrogen Oxides (NO<sub>x</sub>), and other aliphatic fragments.

**SECTION VII - SPILL OR LEAK PROCEDURE**

**STEPS TO TAKE IF SPILLED:** Cleanup personnel must use appropriate personal protective equipment. Evacuate and keep unnecessary people out of spill area. Ventilate area to remove vapors. Dike or dam spilled material and control further spillage, if possible. Do not allow spilled material or wash water to enter sewers, surface waters, or groundwater systems. Absorb spill with inert material, and collect for proper disposal. Wash spill area with water.

**WASTE DISPOSAL:** Waste disposal should be in accordance with existing federal, state and local environmental control laws.

**SECTION VIII - SPECIAL PRECAUTION INFORMATION**

**VENTILATION REQUIREMENTS:** Local, unless applied in confined space or by spray apparatus, in which case proper respiratory equipment (see below) is required.

**PERSONAL PROTECTIVE EQUIPMENT RECOMMENDED FOR NORMAL USE CONDITIONS:**

**EYE PROTECTION:** Chemical goggles.

**SKIN PROTECTION:** Rubber or plastic gloves, wear cloth work clothing including long pants and Long sleeved shirts.

**RESPIRATORY PROTECTION:** In case of insufficient ventilation wear suitable respiratory equipment. Respirator with NIOSH-approved cartridges.

**SECTION IX - HANDLING AND STORAGE**

**STORAGE TEMPERATURE:** Minimum: 41° F  
Maximum: 122° F

**STORAGE PERIOD:** 6 months after receipt of material by customer.

**HANDLING/ STORAGE PRECAUTIONS:** Use only with adequate ventilation/personal protection. Wash thoroughly after handling. Keep container closed when not in use. Do not get in eyes. Do not get on skin or clothing. Avoid breathing dust, vapors, or mist. Protect from freezing. Store in original or similar containers. Protect from light.

**SECTION X – REGULATORY INFORMATION**

**WHMIS:** D2A – Skin sensitizer

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# MATERIAL SAFETY DATA SHEET

## SECTION I

DATE OF PREPARATION

June 2011

**PRODUCT NAME:** ICO Ure Guard Liner  
**PRODUCT CLASS:** Polyurethane activator, Part B  
**PRODUCT TYPE:** Aromatic Isocyanate  
**D.O.T. CATEGORY:** UN3082 Other regulated substances, liquid, N.O.S.  
(4,4' -Diphenylmethane Diisocyanate) 9 PG III  
**ADDRESS:** International Coatings  
Div. of Milamar Coatings, L.L.C.  
311 N.W. 122<sup>nd</sup> 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 2\*, Flammability 1, Reactivity 1

Listed below are the hazardous component(s) as 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:

Weight %	Components	CAS - Number
36-46%	Polymeric Diphenylmethane Diisocyanate	9016-87-9
22-32%	4,4' Diphenylmethane Diisocyanate	101-68-8
24-24%	Diphenylmethane Diisocyanate (MDI) Mixed Isomers	26447-40-5

## SECTION III - PHYSICAL DATA

**PHYSICAL STATE:** Liquid  
**SPECIFIC GRAVITY:** 1.24g/cm<sup>3</sup> at 68°F  
**DENSITY:** 10.35 lbs/gal at 68° F  
**ODOR:** Very slight, musty  
**VAPOR PRESSURE:** 0.00001 mm Hg @ 70° F

## SECTION IV - FIRE AND EXPLOSION HAZARD DATA

**FLASH POINT:** >428°F (Pensky Martens Closed Cup)  
**LFL:** ND  
**UFL:** ND  
**EXTINGUISHING MEDIA:** CO<sub>2</sub>, Dry chemical, Alcohol, Foam, Water spray for large fires  
**SPECIAL FIRE FIGHTING PROCEDURES:** Firefighters should wear NFPA compliant structural firefighting protective equipment, including self-contained breathing apparatus and NFPA compliant helmet, hood, boots and gloves. Avoid contact with product. Decontamination equipment and protective clothing prior to reuse. During a fire, isocyanate vapors and other irritating, highly toxic gases may be generated by thermal decomposition or combustion. Cool fire-exposed containers with cold water spray. Heat will cause pressure buildup and may cause explosive rupture.  
**Note:** Will burn under right conditions of heat and oxygen supply.

## SECTION V - HEALTH HAZARD DATA

### EFFECTS OF OVER EXPOSURE

**INHALATION:** Diisocyanate vapors or mist at concentrations above the TLV or PEL can irritate (burning sensation) the mucous membranes in the respiratory tract (nose, throat and lungs) causing a runny nose, sore throat, coughing, chest discomfort, shortness of breath and reduced lung function (breathing obstruction). Persons with pre-existing non-specific bronchial hyper reactivity can respond to concentrations below TLV or PEL with similar symptoms as well as asthma like symptoms. These symptoms can be delayed up to several hours after exposure. These effects are usually reversible.

**EYES:** Causes irritation with symptoms of reddening, tearing, stinging and swelling. May cause temporary corneal injury. Vapor or aerosol may cause irritation with symptoms of burning or tearing.

**SKIN:** Causes irritation with symptoms of reddening, itching and swelling. Persons previously sensitized can experience allergic skin reactions with symptoms of reddening, itching, swelling and rash. Cured material is difficult to remove. Contact with MDI can cause discoloration.

**INJECTION:** May cause irritation; Symptoms may include abdominal pain, nausea, vomiting and diarrhea.

**FIRST AID**

- EYES:** Flush with water for at least 15 minutes. Use lukewarm water if possible. Use fingers to ensure that eyelids are separated and that the eye is being irrigated. **Get medical attention.**
- SKIN:** Immediately remove contaminated clothing and shoes. For severe exposure, immediately get under safety shower and begin rinsing. Get medical attention if irritation develops.
- INHALATION:** Remove to an area free from further exposure. **GET MEDICAL ATTENTION IMMEDIATELY** Administer oxygen or artificial respiration as needed. Asthmatic symptoms may develop and may be immediate or delayed up to several hours. Extreme asthmatic reactions can be life threatening.
- INGESTION:** **GET MEDICAL ATTENTION IMMEDIATELY** Do not induce vomiting. Wash mouth out with water. Do Not give anything by mouth to an unconscious person.

**SECTION VI - REACTIVITY DATA**

**STABILITY:** Contact with moisture, other materials that react with isocyanates or temperatures above 350 °F may cause polymerization.

**INCOMPATIBILITY (Materials to Avoid):** Avoid bringing into contact with strong acid bases, water, amines, alcohols and copper alloys

**HAZARDOUS DECOMPOSITION PRODUCTS:** (from fire or high heat)

Hydrogen cyanide, carbon dioxide (CO<sub>2</sub>), carbon monoxide (CO), oxides of nitrogen (NO<sub>x</sub>), dense black smoke, isocyanic acid, other undetermined compounds.

**SECTION VII - SPILL OR LEAK PROCEDURE**

**LEAK/SPILL:** Evacuate all non-essential personnel. Ventilate, eliminate all sources of ignition. Dike areas to prevent spreading. Wear full protective equipment, including respiratory equipment during clean-up. Absorb spill with inert material. Place in approved waste container.

**MAJOR SPILLS:** If transportation spill occurs, call INFOTRAC 1-800-535-5053. If temporary control of isocyanate vapor is required, a blanket of protein foam may be placed over spill. Large quantities may be pumped into closed, but not sealed containers for disposal

**MINOR SPILLS:** Cover spill area with suitable absorbent material. Pour decontamination solution over spill area allow to react for at least 10 minutes. Shovel into suitable unsealed containers. Transport to a well ventilated area (outside) and add further amounts of decontamination solution. Mixture of water (80%) with non-ionic surfactant Tergitol TMN-10 (20%), or water (90%), concentrated ammonia (3-8% O and detergent (2%). Add about 10 parts of neutralizer per part of isocyanate with mixing. Allow to stand uncovered for 72 hours to let carbon dioxide (CO<sub>2</sub>) escape.

**CLEAN UP:** Decontaminate floor with decontamination solution. Letting stand for at least 15 minutes

**WASTE DISPOSAL:** Waste disposal should be in accordance with existing federal, state and local environmental control laws. Incineration if the preferred method.

**SECTION VIII - SPECIAL PRECAUTION INFORMATION**

**VENTILATION REQUIREMENTS:** Local, unless applied in confined space or by spray apparatus in which case proper respiratory equipment (see below) is required.

**PERSONAL PROTECTIVE EQUIPMENT RECOMMENDED FOR NORMAL USE CONDITIONS**

**EYE PROTECTION:** Chemical safety goggles

**SKIN PROTECTION:** Avoid all skin contact. Chemical resistant gloves (Butyl Rubber, Nitrile Rubber, Neoprene or PVC) Depending on conditions of use, cover as much of the exposed skin area as possible with appropriate clothing to prevent skin contact.

**RESPIRATORY PROTECTION:** Respirator with NIOSH approved cartridges with either a cartridge equipped end of service life indicator (ESLI) certified by NIOSH or a change out schedule, based on objective information or data that will ensure that the cartridges are changed out before the end of the services life, must be developed and implemented.

**SECTION IX - SPECIAL PRECAUTIONS****PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING**

Do not breath vapors, mist or dusts. Use adequate ventilation to keep airborne isocyanate levels below the exposure limits. Wear respiratory protection if material is heated, sprayed, used in confined spaces or if the exposure limit is exceeded. Warning properties (irritation to eyes, nose and throat or odor) are not adequate to prevent over exposure from inhalation. Avoid contact with skin and eyes. Wear appropriate eye and skin protection. Wash thoroughly after handling.

**SECTION X - TRANSPORTATION**

<b>DOT PROPER SHIPPING NAME:</b>	Other regulated substances, liquid, N.O.S. (4,4' -Diphenylmethane Diisocyanate)
<b>DOT HAZARD OR CLASSIFICATION</b>	9
<b>IDENTIFICATION NUMBER</b>	UN 3082
<b>PACKAGING GROUP:</b>	III
<b>LABELS REQUIRED:</b>	Corrosive

**SECTION XI – REGULATORY INFORMATION**

**WHMSIS CLASSIFICATION** D2A, Skin sensitizer

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