

MATERIAL SAFETY DATA SHEET

Trade Name: InstaCote M-12, Isocyanate Part "A"

Section I - General Information

Item Name: M-12 Isocyanate, Part "A"

Manufacture: InstaCote, Inc.
160 C Lavoy Road
Erie, MI 48133

Date MSDS Prepared: October 12, 2004

Last Review Date: May 17, 2012

MSDS Preparers Name/Address: Prepared by manufacturer.

Product Description: Pre-polymerized Isocyanate Blend.

Multiple Parts Product (Y/N): Y

Proprietary (Y/N): Y

Section II - Hazardous Ingredient/Identity Information

<u>Ingredient</u>	<u>% by Wt.</u>	<u>CAS #</u>	<u>Exposure Limits (TWA)</u>
Diphenylmethane Diisocyanate To include	28-36	26447-40-5	0.02 ppm ceiling limit, OSHA 0.005 ppm TLV, ACGIH
4, 4'-Diphenylmethane Diisocyanate (4,4'-MDI)	12	101-68-8	0.02 ppm ceiling limit, OSHA 0.005 ppm TLV, ACGIH
Modified Isomers	70-80	Not Disclosed	Not Listed
Propylene Carbonate	2	108-32-7	Not Listed

Section III - Physical/Chemical Characteristics

Appearance and Odor. Clear, amber color thick liquid with faint odor

Boiling Point: 738°F

Melting Point: 47°F

Vapor Pressure: 0.001 mm Hg @ 130°F

Vapor Density: No data

Specific Gravity: 1.110 ± 0.012 @ 72°F

Decomposition Temp.: Above 738°F

Evaporation Rate: No data

Solubility (H₂O): 0.1% by wt @ 68°F (Reacts vigorously with water)

Percent Volatiles by Volume: unknown

Viscosity: 970 ± 100 cps (Brookfield #2 spindle @ 12 rpm) 72°F

pH: Not applicable

Section IV - Fire and Explosion Hazard Data

Flash Point: >230°F C.O.C.
Lower Explosive Limit: Not Determined
Upper Explosive Limit: Not Determined
Extinguishing Media/Methods: Use dry chemical, CO₂, AFFF (foam). If only water is available Use very large volume. Reaction with water at elevated temperatures may be violent. Runoff water must be retained.
Special Fire Fighting Precautions: Full face shield, self-contained breathing apparatus with full protective gear.
Unusual Fire/Explosive Hazards: Isocyanate and water combined react to produce carbon dioxide. Contaminated, sealed containers may rupture.

Section V - Reactivity Data

Stable (Y/N): Y
Conditions to Avoid: Temperatures below 70 °F cause solidification
Temperatures above 120 °F cause polymer condensation
Materials to Avoid: Product may react violently with water, alcohol, amines, acids, bases
Hazardous Decomposition Products: Oxides of carbon, oxides of nitrogen, ammonia and trace amounts of Hydrogen cyanide.
Hazardous Polymerization: May occur. Avoid contamination with liquid water or water vapor.

Section VI - Health Hazard Data

Routes of Entry

Inhalation (Y/N): Y, May cause respiratory tract irritation(pulmonary edema, nasal discharge, coughing, chest pain. This product may cause respiratory sensitization, in which, after repeated exposures above the occupational exposure limit, hyper-reactive responses may occur in sensitized individuals following minimal doses.
Skin (Y/N): Y, Product exhibits skin sensitization. Some evidence indicates that skin contact may induce a respiratory sensitization reaction.
Ingestion (Y/N): Y, May cause digestive tract and gastrointestinal tract. Systemic ingestion effects are practically non-toxic.
Other: Y, Acute vapor exposures may temporarily cause hazy or blurred vision.
Contact Eye/Skin Hazards: Y, Product is a mild eye and skin contact irritant.
Carcinogenicity Data: No human or animal carcinogenic data is available.
IARC Monographs on the Evaluation of the Carcinogenic: None

First Aid Procedures:

Gross Inhalation: Move victim to fresh air environment. First administer oxygen, if available. Seek immediate medical attention.
Gross Ingestion: If victim is conscious, give at least two glasses of water. DO NOT

INDUCE VOMITING. Seek

Skin Contact - Wash affected areas with soap and water. Wash soiled clothing before reuse.

Severe Eye Contact - Flush eyes with water for 15 minutes. Seek medical attention.

Section VII - Precautions for Safe Handling and Use

Personal Protective Equipment (Routine Use):

Respiratory Protection: Airborne concentrations of chemical should be maintained as low as possible. If vapors or mists are formed, use NIOSH/MSHA approved air supplied respirator to prevent overexposure.

Gloves: Recommend latex, butyl rubber, or nitrile gloves.

Eye Protection: Safety goggles or glasses with face shield are recommended.

Other: Recommend Tyvek suits or coveralls.

Work Practices: This product may be used in indoor or outdoor environments.

Exposures to hazardous components are not expected to exceed permissible limits during routine daily use.

Ventilation: If vapors or mists are generated, local exhaust ventilation is recommended.

Spill/Release Procedures: For major spills, call CHEMTREC 1-800-424-9300. Ventilate area and avoid breathing vapors. Use chemical cartridge respiratory protection and full protective clothing to clean large spills or spills in confined areas. Contain spill, and prevent entry into sewers and waterways.

Neutralization Procedures: Use 0.2-0.5% liquid detergent mixed with 3-8% Ammonium hydroxide or 5-10% sodium carbonate in water. Use 10 parts of solution for one part of Spill material. Allow 30 minutes to deactivate before placing spilled material into drums. Do not mix with any other waste material.

Waste Disposal Procedures: This material is not a listed hazardous waste, nor does it exhibit any hazardous waste characteristic.

Storage/Handling Procedures: Store product in a dry environment, away from strong bases and oxidizers. Do not place in contact with copper metal, copper alloys or zinc coated metals. Purge headspace in partially use container with dry nitrogen gas.

Section VIII-Transportation Information:

Bill of Lading description: Liquid, NOS, (MDI), NA3082, PGIII

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