

MATERIAL SAFETY DATA SHEET

SECTION I - PRODUCT IDENTIFICATION

Manufacturer: Innovative Polymers, Inc
208 Kuntz. St.
St. Johns, MI 48879

Information Phone: 989-224-9500
Emergency Phone: 800-424-9300

Product Type: Polyurethane Resin
Trade Name: IE-100 Resin
Chemical Name: Isocyanate

SECTION II - HAZARDOUS INGREDIENTS

| INGREDIENTS | Exposure Limits--VP | |
|--------------------------|---------------------|--------------------------|
| | CAS # | ACGIH/TLV OSHA/PEL mm HG |
| Modified Diphenylmethane | | |
| Diisocyanate | 25686-28-6 | 0.02 ppm ceiling for MDI |
| Contains MDI | 101-68-8 | OSHA, ACGIH, 1983 |

SECTION III - PHYSICAL DATA

Boiling Range: not determined
Evap. Rate: not determined
Appearance: Clear Amber
Vapor Pressure: mm HG, @20 degrees Celsius <0.0003

Vapor Density: >1.0 (Air =1)
Liquid Density: 1.20 - 1.22
Wt. per gallon: 10.36 lbs.

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flammability Class: Flash Point: >200 Degrees F. PMCT LEL: N/A
UEL: N/A

-EXTINGUISHING MEDIA:

Use water fog, foam, carbon dioxide, or dry chemical extinguishing media.

-SPECIAL FIREFIGHTING PROCEDURES:

Firefighters must be equipped with self-contained breathing apparatus.

-UNUSUAL FIRE & EXPLOSION HAZARDS:

Avoid water contamination in closed containers or confined areas (carbon dioxide evolved). Decomposition and combustion products may be toxic.

SECTION V - HEALTH HAZARD AND PERSONAL PROTECTION INFORMATION

FIRST AID:

EYES: Immediately flush eyes with water for at least 15 minutes. Call a physician.

SKIN: Wash with soap and water. Remove contaminated clothing and launder before reuse.

INGESTION: If swallowed, give large amounts of water. If vomiting occurs give more water. Never give fluids or induce vomiting if the victim is unconscious or convulsing.

INHALATION: If inhaled, treat symptomatically. Consult a physician. Remove to fresh air, give oxygen or artificial respiration if needed.

- TOXICOLOGY INFORMATION:

ACUTE ORAL TOXICITY (albino rats): N/A

ACUTE INHALATION (albino rats): N/A

ACUTE DERMAL TOXICITY (albino rats): N/A

- PRIMARY ROUTE(S) OF EXPOSURE:

SKIN CONTACT: yes

INHALATION: Heated product may produce inhalable vapors.

- SYMPTOMS OF OVEREXPOSURE: Contact with liquid causes eye and skin irritation.

- CHRONIC:

CARCINOGENICITY: NTP? no IARC MONOGRAPHS? no OSHA no

- AGGRAVATION OF EXISTING CONDITIONS: Persons with asthmatic-type conditions, chronic bronchitis, other chronic respiratory diseases, eye conditions or recurrent skin eczema or sensitization should be excluded from working with isocyanates.

- RESPIRATORY PROTECTION: If the exposure level (P.E.L.) for MDI is exceeded, wear a NIOSH approved air supplied respirator.

- VENTILATION: Use local exhaust as necessary to maintain P.E.L.

- PROTECTIVE EQUIPMENT

GLOVES: Rubber or synthetic

EYE PROTECTION: Tight and sealed goggles.

SECTION VI - REACTIVITY DATA

STABILITY: [] Unstable [X] Stable

HAZARDOUS POLYMERIZATION: [X] May occur [] Will not occur

Avoid contamination with moisture and other products that react with isocyanates.

SECTION VI - REACTIVITY DATA (cont.)

INCOMPATIBILITY: Water, alcohols and strong bases.

- **CONDITIONS TO AVOID:** Reaction with moisture may form carbon dioxide.
- **HAZARDOUS DECOMPOSITION PRODUCTS:** Carbon Dioxide, Carbon Monoxide, Nitrogen oxides, ammonia, trace amounts of hydrogen cyanide.

SECTION VII - SPILL OR LEAK PROCEDURES

- **SPILL CONTAINMENT AND RECOVERY:** Wear protective clothing, evacuate all personnel not involved in cleanup. For minor spills, absorb with a suitable absorbent and containerize into open top drums. Decontaminate absorbent and spill area with a mixture of 90% water, 8% ammonia and 2% detergent.
- **DISPOSAL:** Dispose of waste in a licensed facility. Incinerate or landfill in a licensed facility. Do not discharge in waterways or sewer systems.

SECTION VIII - REGULATORY INFORMATION

- **FEDERAL REGULATIONS:** None
- **STATE REGULATIONS:** MDI CAS NO.= 101-68-8
NJ2=New Jersey Environmental Hazardous Substance (present at >or = 1.0%)
NJ3=New Jersey Workplace Hazardous Substance (present at > or = to 1.0%)
PA1=Pennsylvania Hazardous Substance (present at > or = to 1.0%)
PA3=Pennsylvania Environmental Hazardous Substance (present at > or = to 1.0%)
- **CERCLA/SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT (TITLE III)**
none
- **SARA (TITLE III) SECTION 313 - LIST OF TOXIC CHEMICALS (40 CFR 372):**
Diphenylmethane Diisocyanate...60%
- **TOXIC SUBSTANCES CONTROL ACT (TSCA):** All components registered.
- **D.O.T. PROPER SHIPPING NAME:** none
- **D.O.T. I.D.:** none
- **D.O.T. HAZARD CLASSIFICATION:** Non-regulated for domestic USA shipment.
- **BILL OF LADING DESCRIPTION:** Plastic, synthetic, liquid

SECTION IX - PRECAUTIONARY & LABEL INFORMATION

- HMIS LABEL STATEMENT:

HEALTH - 2 FLAMMABILITY - 1 REACTIVITY - 0

PRECAUTIONS: DO NOT USE UNTIL MSDS IS READ AND UNDERSTOOD.

WARNING!

HARMFUL IF INHALED. CAUSES SKIN AND EYE IRRITATION. CAUSES ALLERGIC SKIN AND RESPIRATORY REACTIONS.

IN CASE OF CONTACT-

EYES: Immediately flush with water for at least 15 minutes.
Call a physician.

SKIN: Wash with soap and water. Remove contaminated clothing and launder before reuse.

INHALATION: Remove to fresh air. Give oxygen or artificial respiration, if needed. Call a physician.

INGESTION: If conscious, give large quantities of water.
Get medical attention.

- WARRANTY: Purchaser has the responsibility for determining any applicability of, and compliance with, federal, state, and local laws concerning labeling, use and waste disposal, particularly in making consumer items. Innovative Polymers, Inc. makes no warranty, expressed or implied for the merchantability of fitness of use for any particular application. The sole liability of Innovative Polymers, Inc. for any claims arising out of the manufacture, use, or sale of its products shall be the buyer's purchase price.

- DISCLAIMER:

The information contained herein is believed to be accurate, but is not warranted. Nothing contained herein constitutes a specification nor is it intended to warrant suitability for the intended use.

-PREPARED BY: Michael S. Molitor

-DATE: 08/13/01