

**MATERIAL SAFETY  
DATA SHEET  
UI-5682 PART A**

**PREFORMED LINE PRODUCTS  
URETHANE DIVISION  
1700 Woodhurst Lane  
Albemarle, North Carolina 28001  
704-983-6161**

Emergency Phone Number: Chemtrec 800-424-9300 (within the USA), 202-483-7616 (outside of the USA.)  
Call only in the event of a chemical emergency involving spill, leak, fire exposure, or accident involving chemicals.

MSDS DATE: 12/27/04

Prefomed Line Products recommends that each customer should study this Material Safety Data Sheet and become aware of the Product hazards. Further, to promote safe handling, each customer should notify its employees, agents and contractors of the information on this Material Safety Data Sheet and any Product hazards and safety information. Each customer should furnish a copy of this Material Safety Data Sheet to each of its customers for the Product and should request that such customers notify their employees and customers for the Product of the information on this Material Safety Data Sheet and any Product hazards and safety information.

<b>I. IDENTIFICATION</b>	
PRODUCT NAME: UI-5682 Part A	
CHEMICAL FAMILY: Mod. MDI Isocyanate Formula HMIS	
Codes:	H F R P 3* 1 2 G
<b>II. HAZARDOUS INGREDIENTS</b>	
COMPONENTS	CURRENT LIMITS
Diphenylmethane Diisocyanate 48%	101-68-8 .02 PPM Ceiling
<b>III. PHYSICAL DATA</b>	
Appearance: Clear Liquid	Color: Yellowish
Odor: NE	Boiling Point: 392° F
Vapor Pressure: <.00001 mmHg	Vapor Density: 8.6
Specific Gravity(H2O = 1): 1.2	Weight Per Gallon: 10 lbs.
Solubility in Water: Reacts	% Volatile by Volume: NE
<b>IV. FIRE AND EXPLOSION HAZARD DATA</b>	
Flash Point: >350° F	Method Used: PMCC
Flammable Limits in Air by Volume: Lower: NE Upper: NE	
Extinguishing Method: Foam, Water Fog, Alcohol Foam, CO2, Dry Chemical.	
Special Fire Fighting Procedures/Fire and Explosion Hazards: People who are fighting isocyanate fires must be protected against nitrous oxide fumes and isocyanate vapors by wearing positive pressure self-breathing apparatus and full protective clothing. Down-wind personnel must be evacuated. Do not reseal contaminated containers as pressure buildup may rupture them.	
<b>V. REACTIVITY DATA</b>	
STABILITY: Stable	
CONDITIONS TO AVOID: Exposure to water, acid, base (alkalies, ammonia), alcohols, metal compounds, surface active materials.	
INCOMPATIBILITY: Water, acid, base (alkalies, ammonia), alcohols, metal compounds, surface active materials. Forms heat and CO2 with water.	
HAZARDOUS DECOMPOSITION PRODUCTS: Isocyanate vapor and mist, carbon dioxide, carbon monoxide, nitrogen oxides and traces of hydrogen cyanide.	
HAZARDOUS POLYMERIZATION: May occur. Occurs with incompatible reactants, especially strong bases, water or temperature over 49C which accelerates reactions.	
<b>VI. HEALTH HAZARD DATA</b>	
EYE: May cause pain and slight eye irritation. Corneal injury is unlikely.	

**VI. HEALTH HAZARD DATA (CON'T)**

SKIN CONTACT: A single prolonged exposure is not likely to result in the material being absorbed through the skin in harmful amounts. The LD50 for skin absorption is >2000 mg/kg.

INGESTION: Single dose and oral toxicity is low. The oral LD50 for rats is >5000 mg/kg. No hazards anticipated from ingestion incidental to industrial exposure.

INHALATION: Excessive exposure may cause irritation of the eyes, upper respiratory tract and lungs. EFFECTS MAY BE DELAYED.

SYSTEMIC AND OTHER EFFECTS: Based on available data, repeated exposures are not anticipated to cause additional significant adverse effects. The major active ingredient in this material has been shown to be negative in some vitro ("test tube") mutagenicity test and positive in others.

CARCINOGEN HAZARD:NTP? No IARC MONOGRAPHS? No OSHA REGULATED? No Lung tumors have been observed in the laboratory animals exposed to aerosol droplets of MDI/Polymeric MDI (6mg/m3) for their lifetime. Tumors occurred concurrently with respiratory irritation and lung injury.

**VII. FIRST AID**

EYES: Irrigate with flowing water immediately and continuously for 15 minutes. Consult medical personnel.

SKIN: Remove contaminated clothing immediately, wash skin with soap and water, launder clothing before reuse. Wash off in flowing water or shower.

INGESTION: No adverse effects anticipated by this route of exposure incidental to proper industrial handling.

INHALATION: Remove to fresh air if effects occur. Consult a physician.

**VIII. HANDLING PRECAUTIONS**

EXPOSURE GUIDELINES: ACGIH TLV and OSHA PEL are 0.005 and .02 ppm ceiling for methylene bisphenyl isocyanate (MDI). Provide general and local exhaust ventilation to control airborne levels below the exposure guidelines. Use protective clothing impervious to this material. Remove contaminated clothing immediately, wash skin with soap and water.

VENTILATION AND RESPIRATORY PROTECTION: If current ventilation practices are not adequate to maintain airborne concentrations established exposure limits, additional ventilation or exhaust system maybe required.

EYE PROTECTION: Use chemical safety glasses, goggles, and faceshield for eyes protection.

SKIN PROTECTION: Selection of specific gloves and other skin protection will depend on operation. Use impermeable chemical handling gloves. Selection of the apron or full body-suit will depend on the operation.

SPECIAL HANDLING PRECAUTIONS: NE

STORAGE TEMPERATURE: 70° F - 110° F

AVERAGE STORAGE LIFE: 1 year

SPECIAL STORAGE PRECAUTIONS: Store in well ventilated area.

Diphenylmethane Diisocyanate is a SARA Section 313 Reportable Chemical.

**FOR INDUSTRIAL USE ONLY**

NOTE: The opinions expressed herein are those of qualified personnel within the Prefomed Line Products-Urethane Division Co. The information contained is believed to be current as of the date of this Material Safety Data Sheet. Since the use of this information and opinions and conditions of the use of the product are not within the control of Prefomed Line Products Co., it is the user's obligation to determine the conditions of safe use of the Product.