

**MATERIAL SAFETY
DATA SHEET
UI-5854 PART A
HARD ENCAPSULANT**

**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

Preformed 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.

I. IDENTIFICATION	
PRODUCT NAME:	UI-5854 Part A
CHEMICAL FAMILY:	Polyurethane Polyisocyanate Prepolymer
II. HAZARDOUS INGREDIENTS	
COMPONENTS	CURRENT LIMITS
Reaction product of 4,4'-dicyclohexylmethane diisocyanate with polyoxypropylene glycols	NE
4,4'-dicyclohexylmethane diisocyanate (CAS #5124-30-1)	0.005 ppm TWA (ceiling)
Phthalate ester of long chain aliphatic Alcohol (CAS #3648-20-2)	NE
Proprietary aliphatic diester	NE
Benzoyl Chloride (CAS #98-88-4) <0.05%	NE
III. PHYSICAL DATA	
Appearance: Clear liquid	Color: Colorless or very pale straw.
	Boiling Point: >400°F
Odor: Characteristic ester	Vapor Density (air-1): 4.88
Vapor Pressure: <0.00002 (mmHg)	Weight Per Gallon: 8.5 lbs.
Specific Gravity: 1.02	% Volatile by Volume: Nil
Solubility in Water: Reacts with water	
IV. FIRE AND EXPLOSION HAZARD DATA	
Flash Point: >302°F	Method Used: COC
Flammable Limits: LFL:NE UFL:NE	Extinguishing Method: Carbon dioxide or dry chemical on small fires; water or foam on large fires
Special Fire Fighting Procedures/Fire and Explosion Hazards: Firefighters should wear full protective clothing with self-contained breathing apparatus with full face piece in addition to full protective clothing. Vapors and/or combustion products are toxic and extremely irritating when inhaled.	
V. REACTIVITY DATA	
STABILITY: Stable.	CONDITIONS TO AVOID: Contact with Moisture or other isocyanate reactive materials; temperatures over 180°F.
INCOMPATIBILITY: Water, alcohol, amines, metal compounds, strong bases, surface active agents.	
HAZARDOUS DECOMPOSITION: Carbon monoxide, carbon dioxides of nitrogen, traces of HCN, traces of monomeric dicyclohexylmethane diisocyanate.	
HAZARDOUS POLYMERIZATION: May occur on exposure to extreme heat or isocyanate reactive compounds at elevated temperatures.	
VI. HEALTH HAZARD DATA	
EYE: The 4,4'-dicyclohexylmethane diisocyanate component of this material has been shown to cause mild eye irritation in animals. The symptoms the animals have shown include reddening and tearing of the eyes a corneal opacity. Similar symptoms may be possible in man. Based on the D.O.T. corrosivity test and its similarity to other chemicals, especially the isocyanates and amines, it should be handled as if it could cause severe eye injury.	

SKIN CONTACT: 4,4'-dicyclohexylmethane diisocyanate is a primary skin irritant. Symptoms of irritation include redness, swelling, perhaps pain. Blistering may result from prolonged contact. These symptoms occur at the point of contact. Dicyclohexylmethane diisocyanate is also a potent skin sensitizer. Experience indicates that direct skin contact is the route of exposure most likely to cause sensitization. Once sensitized, an individual may react to airborne levels below the TLV with the following symptoms: itching, and tingling of the earlobe and neck, rash, hives, swelling of the arms and legs or other symptoms common to allergic dermatitis. These symptoms may be immediate or delayed several hours. Any individual having a sensitization reaction to this material should be removed from exposure to any isocyanate.

INGESTION: May cause gastrointestinal irritation.

INHALATION: Inhalation of vapors or spray mist may also cause irritation to the respiratory tract (dry throat, cough, shortness of breath, chest tightness). In addition, sinusitis, bronchitis, edema or respiratory sensitization (asthma-like symptoms) may occur.

SYSTEMIC AND OTHER EFFECTS: Skin allergies, eczema, asthma and other respiratory disorders (bronchitis, emphysema) are possibly aggravated as well.

CARCINOGEN HAZARD: No components of this mixture is known to be carcinogenic.

VII. FIRST AID

EYES: Flush eyes with large quantities of lukewarm, clean water for at least 15 minutes, occasionally lifting eye lids. Obtain immediate medical attention.

SKIN: Remove contaminated clothing. Wash affected area with soap and water. Launder contaminated clothing before reuse. Allergic dermatitis or persistent irritation from contact should be treated by a physician.

INGESTION: Consult a physician.

INHALATION: Move to an area free from risk of further exposure. Provide emergency medical treatment to alleviate any symptoms associated with overexposure.

VIII. HANDLING PRECAUTIONS

EXPOSURE GUIDELINES: 0.005 ppm- TWA skin for 4,4' dicyclohexylmethane diisocyanate (ACGIH TLV)

VENTILATION AND RESPIRATORY PROTECTION: Local exhaust should be used to maintain concentrations below TLV; or if inadequate, supplemental local exhaust may be required. The use air supplied or other respirators approved for use in isocyanate containing environments may be required if airborne concentrations below the recommended TLV cannot be assured.

EYE PROTECTION: Wear chemical splash goggles.

SKIN PROTECTION: Wear chemical resistant gloves and clean, appropriate clothing offering as much coverage of the exposed skin area as possible.

SPECIAL HANDLING PRECAUTIONS: Store in tightly closed containers and protect from exposure to moisture, foreign materials and heat. Do not reseal opened containers if contamination is suspected.

STORAGE TEMPERATURE: (Max.) 120°F (49°C).

AVERAGE STORAGE LIFE: 18 months @ 77°F.

SPECIAL STORAGE PRECAUTIONS: If moisture enters container, pressure can build up due to reaction which produces carbon dioxide, causing sealed container to pressurized and burst. At a maximum storage temperature noted, materials may slowly polymerize without hazard.

IX. SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IF MATERIAL IS SPILLED OR RELEASED: Absorb with oil-absorbent compound and remove. Flush area with detergent and water.

WASTE DISPOSAL METHOD: Landfill in accordance with Federal, State and Local environmental protection regulations.

FOR INDUSTRIAL USE ONLY

NOTE: The opinions expressed herein are those of qualified personnel within the Preformed 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 Preformed Line Products Co., it is the user's obligation to determine the conditions of safe use of the Product.