Material Safety Data Sheet

1. Chemical Product Identification

Product Name: **74-Series Part A**
Chemical Family: Polyurethane Prepolymer

2. Hazardous Constituents

Ingredient/CAS #	Exposure Limits
Toluene diisocyanate (TDI), mixed isomers, CAS 26471-62-5 (<1% by wt)	ACGIH TLV 0.005 ppm TWA OSHA PEL 0.02 ppm (Ceiling)
TDI Prepolymer	None
Other ingredients are trade secret. OSHA or ACGIH has established no exposure limits for any other ingredients.	

3. Health Hazards

PRIMARY ROUTE(S) OF ENTRY: Inhalation, skin or eye contact
EYE: May cause eye irritation.
SKIN: Prolonged or repeated exposure may cause skin irritation, staining, or sensitization.
INGESTION: May cause gastrointestinal discomfort and nausea, lethargy, or diarrhea.
INHALATION: At room temp., vapors are minimal. Vapors or aerosols (e.g., generated during heating or spraying) may cause respiratory irritation. For individuals sensitized to TDI, exposure may result in allergic respiratory reactions (e.g., coughing, difficulty breathing).
CHRONIC EFFECTS: Repeated overexposure to TDI may cause respiratory and dermal sensitization. TDI is listed as a carcinogen by IARC (2B) and NTP. TDI has been shown to cause cancer in lab animals when administered orally. Carcinogenicity via inhalation (the most likely means of industrial exposure) has not been proven.

4. First Aid Measures

EYE CONTACT: Flush with water for at least 15 minutes. Seek medical attention.
SKIN CONTACT: Wipe off. Wash with soap and plenty of warm water.
INHALATION: Remove to fresh air. Treat symptomatically. Seek medical attention.
INGESTION: Immediately drink large quantities of water. Seek medical attention. Do not induce vomiting unless so directed by a medical professional.

5. Fire Fighting Measures

FLASH POINT: Approx. 380°F
EXTINGUISHING MEDIA: Carbon dioxide, dry chemical, foams, or water spray.
HAZARDOUS COMBUSTION PRODUCTS: May include TDI vapor, nitrogen oxides, isocyanates, carbon monoxide, carbon dioxide, and unidentified toxic and irritating compounds.
OTHER INFORMATION: Firefighters wear SCBA and full-body protective suit. Solid stream of water or foam into hot product may cause frothing if it gets below the surface and turns to steam. Use water to cool hot containers.

6. Accidental Release Measures

Clear non-emergency personnel from the area. Don protective equipment. Extinguish sources of ignition. Contain spill to minimize environmental contamination. Absorb spilled material with an inert absorbent. Collect and containerize material. Do not seal containers of spill residue since carbon dioxide is generated upon contact with moisture and dangerous pressure buildup can occur. Neutralize contaminated floor with a mixture of water (90%), ammonia (3-8%) and deter-gent (2%). Clean floor before material reacts with moisture to form a difficult to remove rubber.

7. Handling and Storage

HANDLING: Avoid breathing vapor. Use in well ventilated area. Avoid contact with eyes, skin and clothing. Do not eat, drink or smoke in work area. Wash hands after handling. See Section 8.
STORAGE: Store indoors at room temperature; do not exceed 100°F. Store in original, unopened container. Protect from atmospheric moisture. Do not allow water to get into container.

8. Exposure Controls/Personal Protection

ENGINEERING CONTROLS: Provide general and/or local exhaust to maintain airborne concentrations below exposure limits (see Section 1 for exposure limits). Verify that exposure limits are not exceeded through exposure monitoring.
PERSONAL PROTECTIVE EQUIPMENT: Wear eye protection (e.g., chemical splash goggles or safety glasses), protective clothing, and impermeable gloves (e.g., butyl, or nitrile rubber)
RESPIRATORY PROTECTION: In the absence of good ventilation, use supplied-air respirator; if unavailable, use respirator equipped with organic vapor cartridges. In emergencies, use SCBA. For respirator selection and use, see OSHA's Respiratory Protection Std (29 CFR 1910.134).

9. Physical Characteristics

APPEARANCE: Clear yellow to amber liquid
ODOR: Slightly sweet and acrid odor
SOLUBILITY IN WATER: Insoluble, reacts to form CO_2
VAPOR PRESS.: <.1 mmHg @ 25°C
SPECIFIC GRAVITY: 1.0 @ 25°C
BOILING POINT: Not determined

10. Stability and Reactivity

CONDITIONS TO AVOID: Avoid temperatures >100°F. Avoid moisture.
INCOMPATIBILITY WITH OTHER MATERIALS: Avoid contact with water, acids, bases, alcohols, strong oxidizers, and some metals. Reaction with water generates carbon dioxide, and results in heat and pressure buildup in closed systems.
HAZARDOUS DECOMPOSITION PRODUCTS: Possibly isocyanate vapor, carbon monoxide, nitrogen oxides, and traces of hydrogen cyanide.

11. Regulatory and Other Information

COMMUNITY RIGHT-TO-KNOW: This product contains the following Section 313 ingredient.

Ingredient	CAS #	Weight %
Toluene diisocyanate (mixed isomers)	26471-62-5	<1

DISPOSAL: Upon disposal, this product is not a RCRA hazardous waste (per 40 CFR 261). Upon exposure to moisture, product forms an inert, non-hazardous solid. Follow state and local regulations.
TRANSPORTATION: Not a hazardous material for shipping purposes based on United Nations Recommendations for the Transport of Dangerous Goods and 49 CFR Part 171.
CA PROPOSITION 65: "WARNING: This product contains a chemical [TDI] known to the State of California to cause cancer."
CANADIAN WHMIS CLASSIFICATION (CANADA): D2A HMIS RATINGS: Health=1; Flammability=1; Reactivity=0; PPE=C EMERGENCY SHIPPING INFORMATION: Call CHEMTREC, 800/424-9300
Revision Indicator: Made various minor changes to Section 11.
Disclaimer: The information contained herein is considered accurate; however, the manufacturer makes no warranty regarding the accuracy of the information. The user must determine the suitability of the product for the intended use and accepts all risk and liability associated with that use.