Polytek Development Corp.

MATERIAL SAFETY DATA SHEET

1. Chemical Product and Company Identification

Polytek Development Corp., 55 Hilton St., Easton, PA 18042, 610/559-8620
Product Name: **POLYGEL® LIQUID RUBBER PART A**
(POLYGEL 35, SPRAY 35, 40, 50 & SPRAY 50)
Chemical Family: Polyurethane Prepolymer

2. Hazardous Constituents

Ingredient/CAS #	Exposure Limits
Methylene bis(phenylisocyanate) (MDI),	OSHA PEL 0.02 ppm (Ceiling)
CAS# 101-68-8, and other isomers (< 10%)	ACGIH TLV 0.005 ppm TWA
Toluene diisocyanate (TDI), mixed isomers,	OSHA PEL 0.02 ppm (Ceiling)
CAS 26471-62-5 (<1%)	ACGIH TLV 0.005 ppm TWA
Prepolymer and proprietary plasticizer	None established

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 respiratory and/or dermal 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 MDI or TDI, exposure may result in allergic respiratory reactions (e.g., coughing, difficulty breathing).
CHRONIC EFFECTS: Repeated overexposure to MDI and 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 plenty of water. 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: > 380 °F (estimated)
EXTINGUISHING MEDIA: Carbon dioxide, dry chemical, foams, or water spray.
HAZARDOUS COMBUSTION PRODUCTS: May include MDI and 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. Use water to cool hot containers.

6. Accidental Release Measures

Clear non-emergency personnel from the area. 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 area with a mixture of water (90%), ammonia (3-8%) and detergent (2%). Clean floor before material reacts with moisture in the air and forms 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 2 for exposure limits).
PERSONAL PROTECTIVE EQUIPMENT: Recommend eye protection (chemical safety glasses, goggles, or full-face respirator), protective clothing, and butyl or nitrile rubber gloves.
RESPIRATORY PROTECTION: When hand-mixing with adequate local exhaust, respiratory protection is not normally needed. When spraying, use a respirator equipped with organic vapor cartridges and HEPA filters or a supplied-air respirator. In emergencies, use SCBA. Respirators must be used in compliance with OSHA's respiratory protection standard (29 CFR 1910.134).

9. Physical Characteristics

APPEARANCE: Liquid, color varies
ODOR: Slightly sweet and acrid odor
SOLUBILITY IN WATER: Insoluble, reacts to form CO_2
VAPOR PRESS.: <1 mmHg @ 25°C
SPECIFIC GRAVITY: ~1.1 @ 25°C
BOILING POINT: Not determined

10. Stability and Reactivity

CONDITIONS TO AVOID: Avoid temperatures <60 °F and >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: See Section 5 (Combustion Products).

11. Regulatory and Other Information

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

Ingredient	CAS #	Weight %
Methylene bis (phenylisocyanate)	101-68-8	<10
Toluene diisocyanate (mixed isomers)	26471-62-5	<1

DISPOSAL: Upon disposal, this product is not a RCRA hazardous waste (per 40 CFR 261). When exposed to moisture, Part A forms a non-hazardous solid. Part A cured with Part B may be RCRA hazardous owing to mercury content: check Part B MSDS. Follow state and local regulations.
TRANSPORT: Not a hazardous material based on 49 CFR Part 171.
CA PROPOSTION 65: "WARNING: This product contains a chemical known to the State of California to cause cancer." (Toluene diisocyanate)
HMIS: Health=2*; Flammability=1; Reactivity=1; PPE=H
EMERGENCY SHIPPING INFORMATION: Call CHEMTREC, 800/424-9300.
REVISION INDICATOR: Minor change to Section 3.
DISCLAIMER: The information contained herein is considered accurate; however, Polytek® 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.