

**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**

<u>Ingredient/CAS #</u>	<u>Exposure Limits</u>
Methylene bis(phenylisocyanate) (MDI), CAS# 101-68-8, and other isomers (< 10%)	OSHA PEL 0.02 ppm (Ceiling) ACGIH TLV 0.005 ppm TWA
Toluene diisocyanate (TDI), mixed isomers, CAS 26471-62-5 (<1%)	OSHA PEL 0.02 ppm (Ceiling) 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

VAPOR PRESS.: <1 mmHg @ 25°C

ODOR: Slightly sweet and acrid odor

SPECIFIC GRAVITY: ~1.1 @ 25°C

SOLUBILITY IN WATER: Insoluble, reacts to form CO<sub>2</sub>

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:

<u>Ingredient</u>	<u>CAS #</u>	<u>Weight %</u>
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 PROPOSITION 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.

**1. Chemical Product and Company Identification**

Polytek Development Corp., 55 Hilton St., Easton, PA 18042, 610/559-8620

Product Name: **POLYGEL® 35, SPRAY 35 & QUICK SPRAY 50 PART B**

Chemical Family: Trade secret blend of polyol and amine

**2. Hazardous Constituents**

<u>Ingredient/CAS #</u>	<u>OSHA/ACGIH Exposure Limits</u>
Proprietary polyol	None established
Proprietary aromatic diamine	None established
Proprietary phthalate ester	None established

**3. Health Hazards**

PRIMARY ROUTE(S) OF ENTRY: Skin or eye contact, ingestion

EYE: Causes eye irritation.

SKIN: Exposure may cause skin irritation and/or redness.

INGESTION: Potentially toxic by ingestion. May cause gastrointestinal discomfort if ingested.

INHALATION: At room temperature, vapors are minimal and material is not expected to be an inhalation hazard. Vapors or aerosols (e.g., generated during heating or spraying) may cause respiratory irritation.

CARCINOGENICITY: Not designated as a carcinogen by NTP, IARC, or OSHA.

CHRONIC EFFECTS: For one ingredient, a two-year rat feeding study caused effects in the pancreas, liver, thyroid and eyes. In rare instances, skin sensitization has been reported in humans.

**4. First Aid Measures**

EYE CONTACT: Flush with water for 15 minutes. Seek medical attention.

SKIN CONTACT: Wipe off. Wash with soap and plenty of warm water. Seek medical attention if irritation develops.

INHALATION: Remove to fresh air. Treat symptoms. Seek medical attention if symptoms persist.

INGESTION: If alert, drink water to dilute, and then induce vomiting. Seek medical attention.

**5. Fire Fighting Measures**

FLASHPOINT: >300°F (estimated)

EXTINGUISHING MEDIA: Carbon dioxide, dry chemical, alcohol foam, or water fog.

HAZARDOUS COMBUSTION PRODUCTS: Likely to include carbon monoxide, carbon dioxide, nitrogen oxides, formaldehyde, and unidentified toxic and irritating compounds.

OTHER INFORMATION: Firefighters wear protective gear and self-contained breathing apparatus (SCBA). A direct stream of water or foam into hot product may cause frothing and increase fire intensity.

**6. Accidental Release Measures**

Clear non-emergency personnel from the area. Remove sources of ignition. Contain spill to minimize environmental contamination. Absorb spilled material with non-reactive absorbent such as sawdust, vermiculite, or sand. Collect and containerize spill material. Dispose of in accordance with federal, state and local regulations.

**7. Handling and Storage**

HANDLING: Avoid contact with eyes, skin and clothing. Avoid breathing vapor. Use in adequately ventilated area. Do not eat, drink or smoke in work area. Wash hands after handling. See also Section 8 of MSDS.

STORAGE: Store indoors. Do not exceed 120°F. Store in original container tightly closed.

**8. Exposure Controls/Personal Protection**

ENGINEERING CONTROLS: Provide general and/or local exhaust to minimize airborne concentrations.

PERSONAL PROTECTIVE EQUIPMENT: Wear eye protection (e.g., safety glasses or chemical splash goggles), protective clothing, and impermeable gloves (e.g., nitrile or butyl rubber).

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: White to Pink opaque liquid;  
Quick Spray 50 Part B is yellow liquid

VISCOSITY: 800-900 cP

ODOR: Mild odor

VAPOR PRESSURE: < 1 mmHg @ 25°C

BOILING POINT: No data

SOLUBILITY IN WATER: Negligible

SPECIFIC GRAVITY: ~1.01 @ 25°C

**10. Stability and Reactivity**

CONDITIONS TO AVOID: Avoid excessive heat and exposure to sunlight.

INCOMPATIBILITY WITH OTHER MATERIALS: Oxidizers, acids, organic sulfur compounds, and aluminum.

HAZARDOUS DECOMPOSITION PRODUCTS: Potentially oxides of carbon and nitrogen, organic acids, and other unidentified irritating or toxic compounds

**11. Regulatory and Other Information**

COMMUNITY-RIGHT-TO-KNOW: This product does not contain any compounds above the *de minimis* reporting levels subject to SARA Section 313 reporting requirements.

DISPOSAL: Upon disposal, this product is not a RCRA hazardous waste as defined in 40 CFR 261. Dispose of in accordance with state and local regulations.

DOT TRANSPORT: Not a hazardous material for shipping purposes based on 49 CFR Part 171.

IMDG TRANSPORT: Polygel 35B and Spray 35B are not regulated. But, Polygel QuickSpray 50B is UN 3082, Environmentally hazardous substance, liquid, n.o.s. (aromatic diamine), 9, PG III, Marine Pollutant.

HMIS: Health=2; Flammability=1; Reactivity=0; PPE=C

EMERGENCY SHIPPING INFORMATION: Call CHEMTREC, 800/424-9300.

REVISION INDICATOR: Revised transport information in Section 11.

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