1. Identification

Product Identifier:	**Poly 81-D45 Liquid Rubber Part B** **Poly 81-90 Liquid Rubber Part B**
Product Code(s):	81D45B, 8190B
Use:	Component for Polyurethane Mold Rubber. For Industrial/Professional use only.
Manufacturer:	Polytek Development Corp. 55 Hilton St., Easton, PA 18042 USA
Phone Number:	+1 610-559-8620 (9 a.m. to 5 p.m. EST)
Emergency Phone:	CHEMTREC 800-424-9300 or +1 703-527-3887
E-mail:	sds@polytek.com

2. Hazards Identification

GHS Classification:
Eye Irritation Category 2A
Specific Target Organ Toxicity - Repeated Exposure Category 2
Hazardous to the Aquatic Environment – Acute Hazard Category 1
Hazardous to the Aquatic Environment – Long-Term Hazard Category 1

Label Elements: Warning!

Contains Diethyltoluenediamine

Hazard Phrases

H319 Causes serious eye irritation.
H373 May cause damage to organs (pancreas) through prolonged or repeated exposure.
H400/410 Very toxic to aquatic life with long-lasting effects.

Precautionary Phrases

P260 Do not breathe vapors, mist or spray.
P264 Wash thoroughly after handling.
P273 Avoid release to the environment.
P314 Get medical advice if you feel unwell.
P280 Wear eye and face protection.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 If eye irritation persists: Get medical advice or attention.
P391 Collect spillage.
P501 Dispose of contents and container to licensed, permitted incinerator, or other thermal destruction device in accordance with local and national regulations.

Supplemental Information: No data available.

This is one part of a two-part system. Read and understand the hazard information on Part A before using.

3. Composition/Information on Ingredients

Chemical Name	CAS #	%
Diethyltoluenediamine	68479-98-1	30-75
Other ingredients are not classified as health and/or environmental hazards, and/or are present below cut-off/concentration limits.		

4. First-Aid Measures

Eye Contact: Rinse thoroughly with water, holding the eyelids open to be sure the material is washed out. Remove contact lenses if safe and easy to do. Continue rinsing. Get medical attention if irritation persists.

Skin Contact: Remove contaminated clothing. Wash contact area thoroughly with soap and water. Get medical attention if irritation persists.

Inhalation: Remove person to fresh air. Get medical attention if symptoms persist.

Ingestion: Do not induce vomiting unless directed to do so by medical personnel. Get medical attention.

Most Important Symptoms/Effects: May cause eye and possible skin irritation. May be harmful if swallowed.

Indication of Immediate Medical Attention/Special Treatment: Need for immediate medical attention is not anticipated.

5. Fire-Fighting Measures

Extinguishing Media: Use water fog, foam, carbon dioxide or dry chemical. Do not use solid water stream. Solid stream of water into hot product may cause violent steam generation or eruption.

Specific Hazards: Not classified as flammable or combustible. Product will burn under fire conditions.

Special Protective Equipment & Precautions for Fire-Fighters: Wear positive pressure, self-contained breathing apparatus and full-body protective clothing. Cool fire-exposed containers with water.

6. Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures: Remove all ignition sources. Clear non-emergency personnel from the area. Wear appropriate protective clothing to prevent eye and skin contact and avoid breathing vapors.

Methods and Materials for Containment and Cleanup: Cover with an inert absorbent material and collect into an appropriate container for disposal. Avoid releases to the environment. Report spills and releases as required to appropriate authorities.

7. Handling and Storage

Safe Handling: Use with adequate ventilation. Avoid contact with the eyes, skin and clothing. Wash thoroughly after handling. Do not eat, drink or smoke in the work area. Keep container closed when not in use.

Safe Storage: Store indoors at temperatures below 120°F (49°C). Store in original containers. Avoid getting moisture into containers. Keep containers tightly closed.

8. Exposure Controls/Personal Protection

Occupational Exposure Limits: None established.

Ventilation: Use with adequate general or local exhaust ventilation to minimize exposure levels.

Respiratory Protection: Not needed under normal conditions of use; but, in the absence of good ventilation use an air-purifying respirator with organic vapor cartridges. For possible higher exposures or in an emergency, use a supplied-air respirator.

Skin Protection: Wear impervious rubber (i.e., butyl or nitrile) gloves.

Eye Protection: Wear chemical safety goggles.

Other Protective Measures: Avoid contaminating work surfaces and/or touching contaminated surfaces. Wear impervious clothing to prevent skin contact and contamination of personal clothing. An eye wash facility and washing facility should be available in the work area. Follow applicable regulations and good Industrial Hygiene practice.

9. Physical and Chemical Properties

Appearance: Clear yellow to amber liquid
Odor: Slightly pungent
Odor Threshold: No data available
pH: Not applicable

Melting Point: No data available
Boiling Point: No data available
Flash Point: >176.7°C (350°F)
Evap. Rate: No data available
Upper/Lower Flammability Limits: No data available
Vapor Pressure: <0.1 mm Hg @ 25°C
Vapor Density: No data available
Relative Density: 1.02 @ 25°C
Solubility: Slightly soluble in water
Partition Coefficient: n-octanol/Water: No data available
Auto-Ignition Temp: No data available
Decomposition Temp: No data available
Viscosity: 500-1500 cP @ 25°C

10. Stability and Reactivity

Reactivity: Not normally reactive.
Chemical Stability: Stable under recommended conditions.
Possibility of Hazardous Reactions: Reaction with strong oxidizers generates heat.
Conditions to Avoid: Avoid excessive heat.
Incompatible Materials: Avoid contact with strong oxidizers.
Hazardous Decomposition Products: Thermal decomposition will generate oxides of carbon and nitrogen, organic acids, and other toxic organic compounds.

11. Toxicological Information

Eye Contact: Causes serious eye irritation.
Skin Contact: May cause mild skin irritation. Dermal exposure is the most likely route of exposure.
Inhalation: Vapors and mists may cause mild respiratory irritation.
Ingestion: Not fully determined, but single oral dose toxicity is low. Ingesting large amounts may cause adverse gastrointestinal effects.
Chronic Health Effects: May cause adverse effects in the pancreas.
Acute Toxicity Values: No data available for mixture. For diethyltoluenediamine: Oral rat LD50 738 mg/kg; Inhalation rat LC50 2.45 mg/L/1 hr; Dermal rabbit LD50 >2000 mg/kg
Skin Corrosion/Irritation: Components are not skin irritants.
Eye Damage/Irritation: Diethyltoluenediamine is a serious eye irritant.
Respiratory Irritation: Components are not classified as respiratory irritants.
Respiratory Sensitization: Components are not respiratory sensitizers.
Skin Sensitization: Components are not skin sensitizers.
Germ Cell Mutagenicity: Components are not known mutagens.
Carcinogenicity: Components are not known carcinogens.
Reproductive Toxicity: Components are not known reproductive toxins.
Specific Target Organ Toxicity:
Single Exposure: No data available.
Repeat Exposure: In animal studies, diethyltoluenediamine caused adverse effects in the pancreas at 8-10 mg/kg. At higher doses, adverse effects were also seen in the liver and thyroid.

12. Ecological Information

Ecotoxicity: This product is classified as Hazardous to the Aquatic Environment – Acute and Long-Term Hazard Category 1 based on the concentration of diethyltoluenediamine. For diethyltoluenediamine: Fish LC50 200 mg/L/48 hr; Daphnia EC50 0.5 mg/L/48 hr.
Persistence and Degradability: Not readily biodegradable.
Bioaccumulative Potential: Not expected to bioaccumulate.
Mobility in Soil: No data available.

13. Disposal Considerations

Dispose according to local, state and federal regulations. Upon mixing in proper ratio (see product label) with Poly 81-Series Part A, product forms an inert, non-hazardous solid.

For U.S.: Upon disposal, the Part B and cured rubber are not RCRA-regulated hazardous wastes (per 40 CFR 261).

14. Transport Information

U.S. DOT: Not a hazardous material (49 CFR 171).

IMDG and AIR/IATA: UN3082, Environmentally hazardous substance, liquid, n.o.s. (Diethyltoluenediamine), 9, III.

Emergency Shipping Information: Call CHEMTREC, 800-424-9300 or +1-703-527-3887.

15. Regulatory Information

U.S. FEDERAL REGULATIONS:
CERCLA 103 Reportable Quantity: This product is not subject to reporting under CERCLA. Some states have more stringent reporting requirements. Report all spills in accordance with local, state, and federal regulations.

SARA TITLE III
Section 311/312: Acute Health, Chronic Health
Section 313 Toxic Chemicals: This product contains no chemicals subject to SARA Title III Section 313 Reporting requirements.
Section 302 Extremely Hazardous Substances (TPQ): None

EPA Toxic Substances Control Act (TSCA) Status: All of the components of this product are listed on TSCA.

STATE REGULATIONS:
California Proposition 65: This product does not contain substances known to the State of California to cause cancer and/or reproductive harm.

16. Other Information

Training Advice: All personnel using/handling this product should be trained in proper chemical handling and the need for and use of engineering controls and protective equipment.

Recommended Uses and Restrictions: This product is intended for industrial/professional use only.

SDS Revision Notes: Converted to GHS format.

Disclaimer: The information contained herein is considered accurate; however, Polytek® Development Corp. 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.