

1. Identification

Product Identifier: **BC-8163 Urethane Elastomer Part A**
BC-8165 Urethane Elastomer Part A
BC-8166 Urethane Elastomer Part A

Product Code(s): BC8163A

Use: Component for Polyurethane Mold Rubber. For Industrial/Professional use only.

Manufacturer: Polytek Development Corp.
 2140 Earlywood Drive, Franklin, IN 46131

Phone Number: +1 610-559-8620 (8 a.m. to 6:30 p.m. EST)

Emergency Phone: CHEMTREC 800-424-9300 or
 +1 703-527-3887

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2. Hazards Identification

GHS Classification:

Flammable Liquid – Category 3
 Acute Toxicity - Inhalation Category 4
 Skin Irritation Category 2
 Eye Irritation Category 2B

Label Elements: Warning



Hazard Phrases

H315 Causes skin irritation.
 H226 Flammable liquid and vapor.
 H320 Causes eye irritation.
 H332 Harmful if inhaled.

Precautionary Phrases

P210 Keep away from heat, hot surfaces, sparks, open flames or other ignition sources. No smoking.

P233 Keep container tightly closed.

P240 Ground and bond container and receiving equipment.

P241 Use explosion-proof electrical and ventilating equipment.

P242 Use non-sparking tools.

P243 Take action to prevent static discharges.

P261 Avoid breathing fumes, vapors or mists.

P264 Wash thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves, protective clothing, eye protection, and face protection.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P302+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse affected areas with water.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P304+P340 IF INHALED: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.

P317 Get medical help.

P332+P317 If skin irritation occurs: Get medical help.

P337+P317 If eye irritation persists: Get medical help.

P362+P364 Take off contaminated clothing and wash it before reuse.

P403+P235 Store in a well-ventilated place. Keep cool.

P501 Dispose of contents and container in accordance with local, regional and national regulations.

Supplemental Information: Individuals sensitized to isocyanates should discontinue use. Long-term overexposure to isocyanates may cause lung damage. This is one part of a two-part system. Read and understand the hazard information on part B before using.

3. Composition/Information on Ingredients

Chemical Name	CAS #	%
4,4'-methylenediphenyl diisocyanate	101-68-8	70-80
2,2,4-trimethyl-1,3-pentanediol diisobutyrate	6846-50-0	10-20
Petroleum Distillates	64742-47-8	0-10
Exact concentrations are withheld as trade secret. Other ingredients are not classified as health, physical or environmental hazards, or are present below cut-off/concentration limits.		

4. First-Aid Measures

Eye Contact: Rinse thoroughly with water for at least 15 minutes, holding the eyelids open to be sure the material is washed out. Get prompt medical attention.

Skin Contact: Remove contaminated clothing. Wash contact area thoroughly with soap and water. Get medical attention if irritation or symptoms of exposure develop. Launder clothing before reuse. Discard items that cannot be decontaminated.

Inhalation: Remove person to fresh air. Give artificial respiration if needed. If breathing is difficult, oxygen should be administered by qualified personnel. Get immediate medical attention.

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

Most Important Symptoms/Effects: Causes skin and eye irritation. Vapors or mists may cause respiratory irritation.

Indication of Immediate Medical Attention/Special Treatment: Immediate medical attention is required for asthmatic symptoms or serious inhalation exposures. Respiratory symptoms, including pulmonary edema, may be delayed. Persons receiving significant exposure should be observed 24-48 hours for signs of respiratory distress. Persons sensitized to Diisocyanates should consult a physician before working with respiratory irritants or sensitizers.

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: Flammable liquid. Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. May generate toxic/irritating compounds and dense smoke in 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. Ventilate area. Wear appropriate protective clothing to prevent eye and skin contact and respiratory protection.

Methods and Materials for Containment and Cleanup: Cover with an inert absorbent material and collect into an appropriate container for disposal. Do not seal the container since CO₂ is generated on contact with moisture and dangerous pressure buildup can occur. Decontaminate floor area with a mixture of water plus isopropyl alcohol (10-20%), household ammonia (10%), and detergent (2%).

7. Handling and Storage

Safe Handling: Avoid breathing vapors or mists. 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 between 55°F and 95°F (13°C and 35°C). Store in original, unopened containers. Protect from atmospheric moisture and water since TDI reacts with water to form CO₂ leading to potentially dangerous pressure build up in sealed containers.

8. Exposure Controls/Personal Protection

Occupational Exposure Limits: For 4,4'-methylenediphenyl diisocyanate (CAS 101-68-8):

ACGIH TLV 0.005 ppm TWA

Ventilation: Use with adequate general or local exhaust ventilation to maintain exposure levels below the occupational exposure limits.

Respiratory Protection: If needed (i.e., ventilation is inadequate), use a NIOSH-approved air-purifying, tight-fitting, half-face respirator with organic vapor cartridges. Respirator selection and use should be based on contaminant type, form and concentration. For higher exposures or in an emergency, use a supplied-air respirator. Use respirators in accordance with OSHA's Respiratory Protection Standard (29 CFR 1910.134).

Skin Protection: Wear impervious gloves, such as butyl rubber or nitrile rubber.

Eye Protection: Wear chemical safety goggles/glasses.

Other Protective Measures: Wear impervious clothing to prevent skin contact and contamination of personal clothing. An eye wash and washing facility should be available in the work area. Follow good Industrial Hygiene practices.

9. Physical and Chemical Properties

Appearance: Liquid

Odor: No data available.

Odor Threshold: No data available.

pH: No data available.

Melting Point: No data available

Boiling Point: No data available

Flash Point: 96°F

Evap. Rate: No data available

Flammable Limits: No data available

Vapor Pressure: No data available

Vapor Density: No data available

Relative Density: No data available.

Solubility: Insoluble in water

Partition Coefficient: n-octanol/Water: Reacts with water

Auto-Ignition Temp: No data available

Decomposition Temp: No data available

Viscosity: No data available

10. Stability and Reactivity

Reactivity: Diisocyanates react with many materials and the rate of reaction increases with temperature. Reaction with water generates carbon dioxide and heat.

Chemical Stability: Stable under recommended conditions.

Possibility of Hazardous Reactions: Elevated temperatures can cause hazardous polymerization. Polymerization can be catalyzed by strong bases or water. Reaction with water generates carbon dioxide, and results in heat and pressure buildup in closed systems.

Conditions to Avoid: Avoid moisture and temperatures below 55°F (13°C) and above 95°F (35°C) to protect product integrity.

Incompatible Materials: Avoid contact with water, acids, bases, alcohols, strong oxidizers, and some metals (e.g., aluminum, zinc, brass, tin, copper).

Hazardous Decomposition Products: Possibly isocyanate vapor, carbon monoxide, nitrogen oxides, and traces of hydrogen cyanide.

11. Toxicological Information

Eye Contact: Causes eye irritation.

Skin Contact: Causes skin irritation.

Inhalation: Harmful if inhaled.

Ingestion: No data available.

Chronic Health Effects: No data available.

Acute Toxicity Values: For 4,4'-methylenediphenyl diisocyanate (CAS 101-68-8):

Oral LD₅₀ (rat): >5,000 mg/kg

Dermal LD₅₀ (rabbit): >9,400 mg/kg

Inhalation LC₅₀ (rat): 0.49 mg/L 4hr

Germ Cell Mutagenicity: Product is not classified as a mutagen.

Carcinogenicity: Components are not classified as carcinogens.

Reproductive Toxicity: This product is not classified as a reproductive toxin.

Specific Target Organ Toxicity: No data available.

12. Ecological Information

Ecotoxicity: No data available.

Persistence and Degradability: No data available.

Bioaccumulative Potential: No data available.

Mobility in Soil: No data available.

13. Disposal Considerations

Dispose according to local, state and federal regulations. Upon exposure to moisture, product forms an inert, non-hazardous solid.

14. Transport Information

DOT: UN1268, Petroleum Distillates, n.o.s. (mixture of petroleum distillates), 3, III.

IMDG: UN1268, Petroleum Distillates, n.o.s. (mixture of petroleum distillates), 3, III.

IATA: UN1268, Petroleum Distillates, n.o.s. (mixture of petroleum distillates), 3, III.

EMERGENCY SHIPPING: CHEMTREC, 800-424-9300 or +1-703-527-3887

15. Regulatory Information

U.S. FEDERAL REGULATIONS:

CERCLA Reportable Quantity: RQ for 4,4'-MDI is 5,000 lb. Some States have more stringent requirements. Report spills in accordance with local and state regulations.

SARA TITLE III Section 311/312: Acute and Chronic Health

Section 313 Toxic Chemicals: This product contains the following chemicals subject to SARA Title III Section 313 Reporting requirements:

4,4'-MDI CAS 101-68-8 70-80%

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

STATE REGULATIONS:

California Proposition 65: This product does not contain chemicals known to the State of California to cause cancer and/or reproductive harm. www.P65Warnings.ca.gov

16. Other Information

Training Advice: Train personnel using this product in proper chemical handling, engineering controls and protective equipment.

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

SDS Revision Notes: GHS Update, December 13, 2019

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.