



Material Safety Datasheet

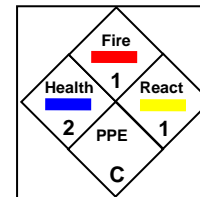
BC8321 Iso Part A

Urethane Elastomer System

MSDS Version: 021014

I. Basic Information

Manufacturer: BCC Products
 Address: 2140 Earlywood Drive
 Franklin, Indiana 46131
 Emergency Phone: (317) 736-4090
 Transportation Emergency Phone Number: Chem-trec 1-800-424-9300
 Chemical State: Liquid
 Chemical Type: Mixture



II. Ingredients

CAS No.	Chemical Name	% Range	EHS	NTP	IARC	SUB Z	SARA 313	OSHA PEL	ACGIH TLV	Other Limits
26471-62-5	Toluene diisocyanate, mixed isomers	<1					x	0.02 ppm	0.005 ppm	NE
6846-50-0	2,2,4-Trimethyl-1,3-pentenediol diisobutyrate	20-35								
9057-91-4	Poly(oxy(methyl-2-ethane)), toluene diisocyanate polymer	65-80								

NE = None Established

III. Hazardous Identification

Hazard Category

Acute Chronic Fire Pressure Reactive

Hazardous Identification Information

- **Warning!**
- **Light Yellow Viscous Liquid**
- **Contains Trace Toluene Diisocyanate (TDI)**
- **Contact may cause skin, eye and respiratory tract irritation.**
- **Avoid moisture contamination to protect product quality.**



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IV. First Aid Measures

Route(s) of entry:

Inhalation, ingestion, skin and eye contact.

Health Hazards (Acute and Chronic):

Acute (short term)

May cause skin and eye irritation. Inhalation of vapors may cause respiratory tract irritation.

Chronic (Delayed):

Repeated skin and eye contact may produce sensitivity (rash, itching). Repeated inhalation of vapors may cause immediate or delayed respiratory sensitization leading to asthma-like condition and difficulty in breathing.

Signs and Symptoms:

Contact may cause skin, eye and respiratory tract irritation.

Medical Conditions Generally Aggravated by Exposure:

None Known.

Emergency and First Aid Procedures:

SKIN CONTACT: Remove contaminated clothing and wash affected area with isopropyl alcohol followed by soap and water. Get medical attention if irritation or other symptoms develop.

EYE CONTACT: Rinse thoroughly with water for at least 15 minutes, holding eyelid open to be sure the material is washed out. Get medical attention if irritation persists.

INGESTION: DO NOT INDUCE VOMITING. Drink 1-2 glasses of water and contact a physician. Do not give anything by mouth to an unconscious person.

INHALATION: Remove person to fresh air. If person is not breathing, give mouth-to-mouth resuscitation and contact a physician.

OTHER HEALTH WARNINGS: In an NPT study, Toluene Diisocyanate, TDI, (a component of this product) was carcinogenic when given orally to rats and mice at maximum tolerated doses. TDI was not carcinogenic in a two-year inhalation study.

V. Fire Fighting Measures

Flash Point: > 270°F

Lower Explosive Limit: NE

Upper Explosive Limit: NE

Fire Extinguishing Media: Foam, Water Fog, Carbon Dioxide or Dry Chemical Extinguishers. If water or foam is used, large amounts should be used as this product will react with water to produce heat and carbon dioxide gas.

Unusual Fire and Explosion Hazards: This product is combustible but will not burn readily. This material can burn if strongly heated. Contamination of isocyanates with water releases carbon dioxide which may result in dangerous pressure build-up in closed containers. DO NOT reseal contaminated containers.

Special Fire Fighting Procedures: Wear an approved, positive pressure, self-contained breathing apparatus and full protective clothing. Cool fire exposed containers with water. Do not get water inside containers. Do not breathe combustion products. Do not release water from firefighting to sewers or waterways.

Hazardous Combustion Products: Oxides of carbon and nitrogen, isocyanate vapors, hydrogen cyanide, amines and various hydrocarbons.



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VI. Accidental Release Measures

Steps to be taken in case material is released or spilled:

Wear Protective equipment as described in Section 8. Eliminate all ignition sources. Ventilate spill area. Stop leak if you can without risk. Cover liquid with an inert absorbent material (saw dust, vermiculite, or wet sand). After the material is absorbed scoop up and place in containers for disposal. Treat the cleaning materials with the prepared decontamination solution and leave the container open in a well ventilated area for 48 hours. The spill area should also be decontaminated with the following decontamination solution: 90% water, 2% detergent soap, and 8% concentrated ammonia. Report the release as required by local, state and federal authorities.

VII. Handling and Storage

Precautions to be taken:

Store in a cool, dry place in tightly sealed containers. Protect from heat and moisture contamination.

Other Precautions:

Avoid contact with skin, eyes and clothing. Any potential hazard can be minimized by using the recommended protective equipment. Follow all MSDS precautions in handling empty containers.

VIII. Exposure Controls / Personal Protection

Chemical Name	Exposure Limits
Poly(oxy(methyl-2-ethane)), toluene diisocyanate polymer	None Established
2,2,4-Trimethyl-1,3-pentanediol diisobutyrate	None Established
Toluenediisocyanate (mixed isomers)	0.005 ppm TWA ACGIH TLV 0.02 ppm Ceiling OSHA PEL

Ventilation: Use local exhaust ventilation as needed to minimize exposure levels and maintain exposure levels below the occupational exposure limits.

Respiratory Protection: In operations where exposure limits are exceeded or exposure levels are unknown, a NIOSH or other authority approved supplied air respirator appropriate for the form and concentration of the contaminants should be used. Air-purifying respirators may be used under some conditions with a cartridge change schedule that is based on the expected airborne exposure levels. The odor threshold for TDI cannot be used to detect unsafe conditions. Selection and use of respiratory equipment must be in accordance with OSHA 1910.134 or other applicable regulations and good industrial hygiene practice.

Skin Protection: Wear impervious gloves such as butyl rubber, teflon or viton to avoid skin contact.

Eye Protection: Chemical safety goggles recommended.

Other Protective Equipment: Impervious apron, boots and other clothing are recommended if needed to avoid contact or if splashing is possible.



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IX. Physical and Chemical Properties

Boiling Point: >400°F **Melting Point:** NE **Evaporation Rate:** NE
Vapor Pressure (mm Hg): NE **Vapor Density (Air = 1):** NE

Solubility in water: Reacts slowly with water to produce carbon dioxide gas.
Appearance and odor: Solid or viscous liquid, characteristic TDI odor.
Other Information: Volatility at 75°F = very low
Percent Volatile by Volume (%) = negligible
Specific Gravity = 1.2

X. Stability and Reactivity

Stability: *Stable*

Incompatibility (materials to avoid): Water, strong bases, oxidizers, alcohols, amines and other materials which react with isocyanates.

Decomposition By-Products: TDI vapors, cyanates, hydrocarbons, oxides of carbon and nitrogen and traces of hydrogen cyanide (HCN).

Hazardous polymerization: *Will not occur.*

If the material is heated above 160°F for extended periods, polymerization will occur but it does not constitute a safety hazard.

XI. Toxicological Information

Potential Health Effects:

Eye: Causes irritation of the eyes with redness, pain and tearing. Corneal injury is possible.

Skin: May cause irritation, skin discoloration and hardening of the skin. May cause allergic skin reaction (rash, itching and swelling). Skin contact may also cause an allergic respiratory reaction as described under inhalation.

Inhalation: Toxic if inhaled. Breathing vapors may cause irritation of the nose, throat and upper respiratory tract and central nervous system effects such as dizziness and intoxication. May cause allergic respiratory reaction in individuals who are sensitized to isocyanates. Symptoms may include eye irritation, sore throat, nasal discharge, coughing, difficulty breathing and a feeling of tightness in the chest. Fever, chills, headache and fatigue may also occur. Effects may be delayed. Severe exposures may cause inflammation of the lung (chemical pneumonitis), asthmatic symptoms with wheezing and accumulation of fluid in the lungs (pulmonary edema) which can be fatal.

Ingestion: Ingestion may cause mouth, throat and gastrointestinal irritation.

Chronic: Repeated skin contact or inhalation may cause sensitization with allergic reaction or asthmatic symptoms upon future exposure. Sensitized individuals react to very low concentrations of TDI, below 0.001 ppm. Symptoms can occur immediately following exposures or can be delayed for several hours. Death has occurred in individuals accidentally exposed to low concentrations of TDI. Exposure to TDI can also cause hypersensitivity pneumonitis (an allergic lung disease) with symptoms of fever, shortness of breath, malaise, cough and chills. Chronic exposure to TDI may also cause impaired lung capacity. Cross sensitivity to other isocyanates may occur

Carcinogen Status: TDI is listed as a possible human carcinogen (group 2B) by IARC and as reasonably anticipated to be a carcinogen by NTP. None of the other components of this product are listed as carcinogens by OSHA, IARC, NTP, or ACGIH.



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Medical Conditions Aggravated by Exposure: Employees with pre-existing eye, skin and respiratory disease may be at increased risk from exposure. Individuals who are sensitive to isocyanates should not be exposed to this product.

Acute Toxicity Values:

Poly(oxy(methyl-2-ethane)), toluene diisocyanate polymer : No data available.

2,2,4-Trimethyl-1,3-pentanediol diisobutyrate: No data available

Toluenediisocyanate:

Oral: LD50 rat 3060 mg/kg;

Inhalation: LC50 rat 57 mg/m³/1 hr, 99 mg/m³/4 hr

XII. Ecological Information

None Available

XIII. Disposal Considerations

Product

Observe all federal, state, and local environmental regulations.

Contaminated packaging

Dispose of as unused product. Waste must be disposed of in accordance with federal, state and local environmental control regulations. Incinerate or bury in a licensed facility.

XIV. Transportation Information

DOT Shipping Name: Not regulated as a hazardous material

DOT Hazard Class: None

UN Number: None

DOT Labels Required (49CFR172.101): None

Reportable Quantity: 10,000 lbs

IMDG Shipping Name: Not regulated as a dangerous good

IMDG Hazard Class: None

UN Number: None

IMDG Labels Required (49CFR172.101): None

IMDG Marine Pollutant: No



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XV. Regulatory Information

U.S. FEDERAL REGULATIONS:

CERCLA 103 Reportable Quantity: This product has an RQ of 10,000 lbs based on RQ of Toluenediisocyanate of 100 lbs present at 1% maximum. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

SARA TITLE III:

Hazard Category for Section 311/312: Acute Health, Chronic health

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

Section 313 Reporting requirements: Toluenediisocyanate (CAS number 264-716-25)

Section 302 Extremely Hazardous Substances (TPQ): Toluenediisocyanate (100 lbs TPQ)

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

STATE REGULATIONS:

Massachusetts Right To Know Components

Toluenediisocyanate-mixed isomers CAS-No. 26471-62-5

Pennsylvania Right To Know Components

Toluenediisocyanate-mixed isomers CAS-No. 26471-62-5

New Jersey Right To Know Components

Toluenediisocyanate-mixed isomers CAS-No. 26471-62-5

Illinois Right To Know Components

None

California Prop. 65 Components

WARNING! This product contains a chemical known to the State of California to cause cancer.

Toluenediisocyanate-mixed isomers CAS-No. 26471-62-5

California Prop. 65 Components

WARNING! This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

Toluenediisocyanate-mixed isomers CAS-No. 26471-62-5



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XVI. Other Information

HMIS Ratings: Health – 2* Flammability - 1 Physical Hazard - 1
NFPA Ratings: Health – 2 Flammability - 1 Instability - 0
* = Chronic

MSDS Revision History

2/10/14: New Issue

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. BCC Products shall not be held liable for any damage resulting from handling or from contact with the above product.

In this document, the following abbreviations were used:

- NA = Not Applicable
- NE = Not Established