SAFETY DATA SHEET



TC-872 PART A

1. Identification

Product identifier: TC-872 PART A **Relevant identified uses:** Polyurethane resin

Manufacturer / Supplier

BJB Enterprises, Inc. 14791 Franklin Avenue Tustin, CA 92780 **Emergency Phone:** (714) 734-8450 Emergency telephone number (24 hour) CHEMTREC (USA & Canada): (800) 424-9300 or (703) 527-3887 CCN# 2820

2. Hazard identification

Classification of the substance or mixture

Health hazards:

Acute Toxicity (Inhalation), Category 4 Respiratory Sensitization, Category 1 Skin Sensitization, Category 1 Target Organ Toxicity (Single exposure), Category 3

Label elements



Health hazard Exclamation mark

Signal word: DANGER

Hazard statement(s)

- H332: Harmful if inhaled.
- H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- H317: May cause an allergic skin reaction.
- H335: May cause respiratory irritation.

Precautionary statement(s)

Prevention:

- P261: Avoid breathing dust/fume/gas/mist/vapours/spray.
- P271: Use only outdoors or in a well-ventilated area.
- P284: In case of inadequate ventilation wear respiratory protection.
- P272: Contaminated work clothing should not be allowed out of the workplace.
- P280: Wear protective gloves/protective clothing.

Response:

P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P342+P311: If experiencing respiratory symptoms: Call a POISON CENTER/doctor/physician.

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

P333+P313: If skin irritation or rash occurs: Get medical advice/attention.

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

Storage:

P403+P233: Store in a well-ventilated place. Keep container tightly closed.

P405: Store locked up.

Disposal:

P501: Dispose of contents/container in accordance with local/regional/national/international regulations.

3. Composition/information on ingredients

Chemical name	% w/w	CAS No.
Hexane, 1,6-diisocyanato-, homopolymer	40 - 70	28182-81-2
Polyurethane prepolymer	10 - 30	Proprietary
Hexanedioic acid, bis(2-ethylhexyl) ester	10 - 30	103-23-1
Hexamethylene-1,6-diisocyanate	0.1 - 1	822-06-0
Toluene diisocyanate	< 0.1	26471-62-5

4. First-aid measures

Eye: Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Get medical advice/attention if irritation develops.

Skin: Immediately wash skin with soap and plenty of water. Remove contaminated clothing. Get medical advice/attention if irritation or rash develops. Wash clothing before reuse.

Ingestion: If swallowed, call a physician immediately. Do not induce vomiting unless directed to do so by medical personnel. Provided the patient is conscious, wash out mouth with water. Never give anything by mouth to an unconscious person.

Inhalation: Remove to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Get immediate medical attention.

Indication of immediate medical attention and special treatment needed, if necessary: Symptomatic and supportive therapy as needed. Following severe exposure medical follow-up should be monitored for at least 48 hours.

5. Fire-fighting measures

Suitable extinguishing media: Water spray, carbon dioxide, dry chemical, or foam.

Hazardous combustion products: Carbon monoxide, carbon dioxide, and isocyanate-containing vapors.

Fire fighting procedures: Cool fire exposed containers with water spray. Remove containers from the fire area if possible. Do not release runoff from fire control methods to sewers or waterways.

Fire fighting equipment: Firefighters should wear positive pressure self-contained breathing apparatus (SCBA) and consider use of unmanned hose holders or monitor nozzles for fighting large fires.

6. Accidental release measures

Small spill: Evacuate the area. Clean-up should only be performed by trained personnel. People dealing with a major spill should wear full protective clothing including appropriate respiratory protection. Prevent product spill from entering sewers or waterways. Neutralize small spills with a decontaminant.

Large spill: Contain and absorb large spills onto an inert, non-flammable adsorbent carrier (such as earth or sand). Shovel into open-top drums or plastic bags for further decontamination, if necessary. Wash the spill area clean with a liquid decontaminant. Remove and properly dispose of residues. Notify applicable government authorities if release is reportable. (See CERCLA in Section 15).

Environmental precautions

Water spill: Do not discharge into drains, surface waters, or groundwater.

General procedures: Refer to section 8 of SDS for personal protection details.

Release notes: Composition and extent of any spill should be evaluated against local regulations and reported to the proper agencies, if necessary.

7. Handling and storage

General procedures: Avoid contact with eyes, skin and clothing. Use only with adequate ventilation. Avoid breathing vapor over open containers. Avoid open container exposure to damp air. Avoid breathing aerosols, mists, and vapors.

Precautions for safe handling: Use appropriate personal protective equipment as specified in Section 8. Handle in a well-ventilated area. Handle

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and use in a manner consistent with good industrial/manufacturing techniques and practices.

Conditions for safe storage: Store in a dry and well-ventilated place, away from excessive heat, in original or similar container. Avoid unnecessary contact. Protect from freezing. Containers should be tightly sealed to prevent contamination with foreign materials.

Storage temperature: 65-80°F (18-27°C)

Shelf life: 6 months from date of shipment under manufacturers recommended storage conditions.

8. Exposure controls/personal protection

Exposure controls

Control parameters				
	Occupational exposure limit values			
Chemical name	Type ppm n		mg/m ³	
Hexamethylene-1,6-diisocyanate	OSHA PEL	TWA	-	-
		STEL	-	-
	ACGIH TLV	TWA	0.005	-
		STEL	-	-
	NIOSH REL	TWA	0.005	0.035
		STEL	-	-
Toluene diisocyanate	ACGIH TLV	STEL	0.005	-

Appropriate engineering controls: Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

Individual protection measures, such as personal protective equipment

- Eye / face protection: Safety goggles or glasses are recommended. Plastic face shields should be used for complete face protection to protect against possible splashing or spraying of material. ANSI Z87.1 or approved equivalent.
- Skin protection hand protection: Chemical-resistant gloves and chemical goggles, face-shield, and synthetic apron or coveralls should be used to prevent contact with eyes, skin, or clothing. Wear nitrile or neoprene gloves. Chemical resistant gloves lined with polyethylene offer maximum protection.
- **Respiratory protection:** Exhaust ventilation recommended. An organic vapor cartridge or fresh air supplied respirator (NIOSH approved) may be necessary for certain applications. Consider the type of application, environmental concentrations, and other materials being used concurrently when determining respirator use and selection. Observe OSHA regulations for respirator use (29 CFR 1910.134).
- Skin protection other: Protective clothing should be selected and used in accordance with "Guidelines for the Selection of Chemical Protective Clothing" published by ACGIH.
- **Occupational hygiene practices:** Contaminated clothing should be changed and washed before reuse. Eating, drinking and smoking in immediate work area should be prohibited. Wash hands before eating.
- Other use precautions: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Training is important. Follow all label precautions.

9. Physical and chemical properties

Physical state: Liquid Color: Colorless Odor: Slight pH: No data available Initial boiling point and boiling range: No data available Flash point: 193.3°C (380°F) Pensky-Martens CC Vapor pressure: No data available Relative vapor density: No data available Relative density: 1.06 (water=1) at 25°C (77°F)

Solubility: Reacts slowly with water

Dynamic viscosity: 830 Centipoise at 25°C (77°F)

Percent volatiles: 0.08

VOC content: < 0.85 g/l Calculated. Theoretical VOC minus water and exempt solvents.

10. Stability and reactivity

Reactivity: Hazardous reactions will not occur under normal transport or storage conditions.

Chemical stability: This product is stable under normal ambient conditions of temperature and pressure.

Conditions to avoid: High temperatures, moisture, and freezing conditions.

Possibility of hazardous reactions: Reacts violently with amines (exothermic). Exothermic reactions with acids, alkalis, powerful oxidants, and alcohols. Reacts with water, whereby carbon dioxide is produced; pressure may build up in closed containers (danger of bursting).

Hazardous decomposition products: Carbon monoxide, carbon dioxide, and isocyanate-containing vapors.

Incompatible materials: Water, alcohols, amines, acids, bases, and strong oxidizing agents.

11. Toxicological information

Acute toxicity

Chemical name	LD ₅₀ (oral) mg/kg(rat)	LD ₅₀ (dermal) mg/kg(rabbit)	LC ₅₀ (inhalation) mg/l
Hexane, 1,6-diisocyanato-, homopolymer	> 2500 mg/kg Rat	> 2000 mg/kg Rat	4600 mg/m3 Rat
Polyurethane prepolymer	No data available	No data available	No data available
Hexanedioic acid, bis(2-ethylhexyl) ester	24600 to 45000 mg/kg Rat	> 2000 mg/kg Rat	> 5.7 mg/l Rat (4 h)
Hexamethylene-1,6-diisocyanate	746 to 959 mg/kg Rat	> 7000 mg/kg Rat	0.124 mg/l Rat (4 h, vapor)
Toluene diisocyanate	3360 mg/kg Rat	10000 mg/kg Rabbit	0.35 mg/l Rat

Skin corrosion / irritation: No data available

Serious eye damage / irritation: No data available

Respiratory or skin sensitization: May cause sensitization by inhalation and skin contact.

Germ cell mutagenicity: No data available

Carcinogenicity

Chemical name	NTP	IARC
Hexanedioic acid, bis(2-ethylhexyl) ester		3
Toluene diisocyanate	2	2B

Reproductive toxicity: No data available

Specific Target Organ Toxicity - single exposure: May cause respiratory irritation.

Specific Target Organ Toxicity - repeated exposure: No data available

Aspiration hazard: No data available

12. Ecological information

Ecotoxicological information: No specific ecological data are available for this product. Refer to Section 6 for information regarding accidental release and Section 15 for regulatory reporting information.

Persistence and degradability: No data available

Bioaccumulative potential: No data available

Environmental data: No data available

Mobility in soil: No data available

13. Disposal considerations

Disposal methods: The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some

product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protections and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

14. Transport information

USA Department of Transport Regulations (DOT): Not Regulated

ICAO / IATA - air: Not Regulated IMO / IMDG - sea: Not Regulated

15. Regulatory information

UNITED STATES

SARA Section 311/312 Hazard Categories

311/312 Health hazards: Refer to Section 2 for hazard classification.

313 reportable ingredients: This product does not contain any substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

CERCLA regulatory: This product contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302).

CERCLA Hazardous Substances and Reportable Quantities (RQ)

Chemical name	% w/w	CERCLA rq
Hexamethylene-1,6-diisocyanate	0.1 - 1	100 lbs.
Toluene diisocyanate	< 0.1	100 lbs.

TSCA (The Toxic Substances Control Act)

TSCA regulatory: This product does not contain any substances subject to TSCA Section 12(b) export notification.

TSCA Status: This product or its components are listed in or exempt from the TSCA inventory requirements.

CAA 112(b) Hazardous Air Pollutants

Chemical name	% w/w	CAS No.
Toluene diisocyanate	< 0.1	26471-62-5

Occupational safety and health administration (osha)

29 cfr1910.119---process safety management of highly hazardous chemicals: None of the chemicals in this product are considered highly hazardous by OSHA.

California Proposition 65: A WARNING: This product can expose you to chemicals including [see table below], which is [are] known to the State of California to cause cancer. For more information, go to <u>www.P65Warnings.ca.gov</u>.

Chemical name	% w/w	Listed
Toluene diisocyanate	< 0.1	• Cancer

USA OSHA Hazard Communication Standard (29CFR 1910.1200): The contents of the SDS comply with the OSHA Hazard Communication Standard 29 CFR 1910.1200.

CANADA

WHMIS Regulatory Status: This product has been classified according to the hazard criteria of the CPR and the SDS contains all the information required by the CPR.

Domestic Substances List (DSL) / Non-Domestic Substances List (NDSL): All components in this product are listed in or exempted from the Domestic Substances List (DSL) or the Non-Domestic Substances List (NDSL).

16. Other information

Reason for issue: Revision **Date revised:** 11/27/2023

Revision summary: This SDS replaces the 07/08/2020 SDS.



HMIS ratings notes: Personal Protection: See Section 8

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