SAFETY DATA SHEET

Date issued : 05/09/2019
SDS number : TC-898 FR PART A
Date revised : 08/15/2022
Revision number : 1

TC-898 FR PART A

1. Identification

Product identifier: TC-898 FR 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
Skin Sensitization, Category 1
Target Organ Toxicity (Single exposure), Category 3

Label elements

Exclamation mark

Signal word: WARNING

Hazard statement(s)

H332: Harmful 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.
P272: Contaminated work clothing should not be allowed out of the workplace.
P280: Wear protective gloves.

Response:

P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P312: Call a POISON CENTER/doctor/physician if you feel unwell.
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:

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

3. Composition/information on ingredients

Chemical name	% w/w	CAS No.
Homopolymer of hexamethylene diisocyanate	60 - 80	Proprietary
Tris(2-chloro-1-methylethyl) phosphate	10 - 30	13674-84-5
Hexamethylene-1,6-diisocyanate	< 0.25	822-06-0

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, nitrogen oxides, hydrogen cyanide, hydrogen chloride, and phosphorus oxides.

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 unnecessary personnel from the spill area. Wear necessary personal protective equipment (PPE) as specified in the SDS or the site emergency response plan. Eliminate all sources of ignition. Ensure adequate ventilation. Dike and contain spill. Prevent product from entering drains or waterways. Absorb with non-combustible material (such as sand, earth, diatomaceous earth, or vermiculite) and transfer to a container for disposal according to local/national regulations.

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 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.

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8. Exposure controls/personal protection

Exposure controls

Control parameters				
	Occupational exposure limit values			
Chemical name	**Type**		**ppm**	**mg/m³**
Hexamethylene-1,6-diisocyanate	**OSHA PEL**	**TWA**	-	-
		STEL	-	-
	ACGIH TLV	**TWA**	0.005	-
		STEL	-	-
	NIOSH REL	**TWA**	0.005	0.035
		STEL	-	-

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: Viscous liquid

Color: Colorless

Odor: Slight

pH: No data available

Initial boiling point and boiling range: No data available

Flash point: > 160°C (320°F) Pensky-Martens CC

Vapor pressure: No data available

Relative vapor density: No data available

Relative density: 1.172 (water=1) at 25°C (77°F)

Solubility: Insoluble

Dynamic viscosity: 1200 Centipoise at 25°C (77°F)

VOC content: Nil

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.

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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, nitrogen oxides, hydrogen cyanide, hydrogen chloride, and phosphorus oxides.

Incompatible materials: Water, alcohols, amines, strong acids, strong 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
Homopolymer of hexamethylene diisocyanate	No data available	No data available	No data available
Tris(2-chloro-1-methylethyl) phosphate	< 2000 mg/kg Rat	> 5000 mg/kg Rabbit	> 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)

Skin corrosion / irritation: No data available

Serious eye damage / irritation: No data available

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

Germ cell mutagenicity: No data available

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

Other adverse effects: 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 Hazardous Substances and Reportable Quantities (RQ)

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).

Chemical name	% w/w	CERCLA rq
Hexamethylene-1,6-diisocyanate	< 0.25	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.

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: This product does not contain any chemicals which are known to the State of California to cause cancer, birth defects or other reproductive harm.

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).

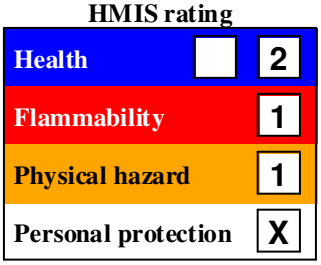
16. Other information

Reason for issue: Revision

Date revised: 08/15/2022

Revision summary: This SDS replaces the 05/09/2019 SDS.

HMIS rating



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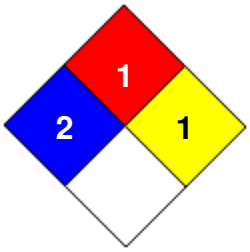

HMIS ratings notes: Personal Protection: See Section 8

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