SAFETY DATA SHEET



Date Prepared: 09/11/2012

SDS No: TC-870 FR PART A

Date Revised: 04/11/2018

Revision No: 3

TC-870 FR PART A

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: TC-870 FR PART A **GENERAL USE:** Polyurethane resin

MANUFACTURER

BJB Enterprises, Inc. 14791 Franklin Avenue Tustin, CA 92780

Emergency Phone: (714) 734-8450

24 HR. EMERGENCY TELEPHONE NUMBERS

CHEMTREC (USA & Canada): (800) 424-9300

or (703) 527-3887 CCN# 2820

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATIONS

Health:

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

GHS LABEL



Exclamation mark

SIGNAL WORD: WARNING

HAZARD STATEMENTS

H302: Harmful if swallowed. H332: Harmful if inhaled.

H317: May cause an allergic skin reaction. H335: May cause respiratory irritation.

PRECAUTIONARY STATEMENTS

Prevention:

P261: Avoid breathing dust/fume/gas/mist/vapours/spray.

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

P264: Wash thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.

P272: Contaminated work clothing should not be allowed out of the workplace.

P280: Wear protective gloves.

Response:

P301+P312: IF SWALLOWED: Call a POISON CENTER/doctor/physician if you feel unwell.

P330: Rinse mouth.

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:

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

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt.%	CAS
Hexane, 1,6-diisocyanato-, homopolymer	40 - 70	28182-81-2
Tris(2-chloro-1-methylethyl) phosphate	15 - 40	13674-84-5
Hexamethylene-1,6-diisocyanate	0.1 - 1	822-06-0
Toluene Diisocyanate	< 0.03	26471-62-5
Naphthalene	< 0.001	91-20-3

4. FIRST AID MEASURES

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

SKIN: Immediately wash skin with soap and plenty of water. Remove contaminated clothing. Get medical 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.

NOTES TO PHYSICIAN: Symptomatic and supportive therapy as needed. Following severe exposure medical follow-up should be monitored for at least 48 hours.

5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Water spray, carbon dioxide, dry chemical, or foam.

HAZARDOUS COMBUSTION PRODUCTS: Carbon monoxide, carbon dioxide, nitrogen oxides, hydrogen cyanide, halogenated hydrocarbons, hydrogen chloride, and oxides of phosphorus.

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 or rivers.

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.

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.

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 GUIDELINES

OSHA HAZARDOUS CO	MPONENTS (29 CFR1910.1200)			
	EXPO	SURE LIMI	TS	
Chemical Name	Туре		ppm	mg/m ³
	OCH A DEV	TWA	-	-
	OSHA PEL	STEL	-	-
Hexane, 1,6-diisocyanato-, homopolymer	ACCHITIV	TWA	-	-
	ACGIH TLV	STEL	-	-
	NIOSH REL	TWA	-	-
	OSHA PEL	TWA	-	-
	OSHA PEL	STEL	-	-
Tris(2-chloro-1-methylethyl) phosphate	ACGIH TLV	TWA	-	-
111s(2-cilioto-1-ineuryletnyt) phosphate	ACGIH ILV	STEL	-	-
	NIOSH REL	TWA	-	-
	MOSII REL	STEL	-	-
	OSHA PEL	TWA	-	-
	OSHA I EL	STEL	-	-
Hexamethylene-1,6-diisocyanate	ACGIH TLV	TWA	0.005	-
	ACCIII TEV	STEL	-	-
	NIOSH REL	TWA	0.005	0.035
	OSHA PEL	TWA	-	-
		STEL	-	-
Toluene Diisocyanate	ACGIH TLV	TWA	0.005	-
Tolucie Disocyanac		STEL	0.02	-
	NIOSH REL	TWA	-	-
		STEL	-	-
Naphthalene	OSHA PEL	TWA	10	50
		STEL	-	-
	ACGIH TLV	TWA	10	52
		STEL	15	79
	NIOSH REL	TWA	10	50
	1,20022 1888	STEL	15	75

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

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: 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: 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: 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).

PROTECTIVE CLOTHING: Protective clothing should be selected and used in accordance with 'Guidelines for the Selection of Chemical Protective Clothing' published by ACGIH.

WORK HYGIENIC 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

ODOR: Slight

COLOR: Pale amber **pH:** No data available

PERCENT VOLATILE: 0.09

FLASH POINT AND METHOD: > 160°C (320°F) Pensky-Martens CC

VAPOR PRESSURE: No data available VAPOR DENSITY: No data available BOILING POINT: No data available

SOLUBILITY IN WATER: Reacts slowly with water **SPECIFIC GRAVITY:** 1.18 (water=1) at 25°C (77°F) **VISCOSITY #1:** 1800 Centipoise at 25°C (77°F)

(VOC): < 1.1 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.

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, nitrogen oxides, hydrogen cyanide, halogenated hydrocarbons, hydrogen chloride, and oxides of phosphorus.

INCOMPATIBLE MATERIALS: Water, strong bases, strong acids, strong oxidizing agents, alcohols, and amines.

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY

Chemical Name	ORAL LD ₅₀	DERMAL LD ₅₀	INHALATION LC50
Hexane, 1,6-diisocyanato-, homopolymer	> 2500 mg/kg Rat	> 2000 mg/kg Rat	0.39 mg/l Rat (4 h, dust/mist)
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, vapour)
Toluene Diisocyanate	3360 mg/kg Rat	10000 mg/kg Rabbit	0.35 mg/l Rat
Naphthalene	490 mg/kg Rat	20000 mg/kg Rabbit	> 0.4 mg/l Rat (4 h)

SKIN CORROSION/IRRITATION: No data available

SERIOUS EYE DAMAGE/IRRITATION: No data available

RESPIRATORY OR SKIN SENSITISATION: May cause sensitization by skin contact.

GERM CELL MUTAGENICITY: No data available

CARCINOGENICITY

Chemical Name	NTP Status	IARC Status
Toluene Diisocyanate	2	2B
Naphthalene	2	2B

REPRODUCTIVE TOXICITY: No data available

STOT-SINGLE EXPOSURE: Inhalation - May cause respiratory irritation. - Respiratory system

STOT-REPEATED EXPOSURE: No data available

ASPIRATION HAZARD: No data available

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: No data available

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.

BIOACCUMULATION/ACCUMULATION: No data available

DISTRIBUTION: No data available

CHEMICAL FATE INFORMATION: No data available

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: 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

DOT (DEPARTMENT OF TRANSPORTATION): Not Regulated

AIR (ICAO/IATA): Not Regulated VESSEL (IMO/IMDG): Not Regulated

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

311/312 HAZARD CATEGORIES: Acute Health Hazard

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 (COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT)

CERCLA REGULATORY: For this/these chemicals, release of more than the Reportable Quantity to the environment in a 24-hour period requires notification to the National Response Center (800-424-8802 or 202-426-2675):

Chemical Name	Wt.%	CERCLA RQ
Hexamethylene-1,6-diisocyanate	0.1 - 1	100 lbs.
Toluene Diisocyanate	< 0.03	100 lbs.
Naphthalene	< 0.001	100 lbs.

TSCA (TOXIC SUBSTANCE 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.

CLEAN AIR ACT

Chemical Name	Wt.%	CAS
Toluene Diisocyanate	< 0.03	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: WARNING: This product can expose you to chemicals which are known to the State of California to cause cancer, birth defects and/or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Chemical Name	Wt.%	Listed
Toluene Diisocyanate	< 0.03	Cancer
Naphthalene	< 0.001	Cancer

OSHA HAZARD COMM. RULE: The contents of the SDS comply with the OSHA Hazard Communication Standard 29 CFR 1910.1200.

CANADA

WHMIS (WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM): 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 SUBSTANCE LIST (INVENTORY): All components in this product are listed in or exempted from the Domestic Substances List (DSL) or the Non-Domestic Substances List (NDSL).

GENERAL COMMENTS: No data available

16. OTHER INFORMATION

REASON FOR ISSUE: Revision

Date Revised: 04/11/2018

REVISION SUMMARY: This SDS replaces the 12/28/2015 SDS.





HMIS RATINGS NOTES: Personal Protection: See Section 8

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