

MATERIAL SAFETY DATA SHEET



Date Issued: 11/30/2006
MSDS No: ST-1060 PART A
Date-Revised: 11/15/2011
Revision No: 1

ST-1060 PART A

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: ST-1060 PART A
GENERAL USE: Polyurethane resin
CHEMICAL FAMILY: Diisocyanate terminated polypropylene glycol

MANUFACTURER

BJB Enterprises, Inc.
 14791 Franklin Avenue
 Tustin, CA 92780
Customer Service Number: (714) 734-8450
Fax: (714) 734-8929

24 HR. EMERGENCY TELEPHONE NUMBERS

CHEMTREC (US Transportation): (800) 424-9300
 or (703) 527-3887

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

PHYSICAL APPEARANCE AND ODOR: Pale yellow viscous liquid with a slight odor.

IMMEDIATE CONCERNS: May cause eye and skin irritation. Use in well ventilated areas. Avoid breathing vapors. Avoid contact with strong oxidizers and strong acids, as sudden reaction may result in fire and toxic fumes. Reacts slowly with water to produce carbon dioxide which may rupture containers. This reaction accelerates at higher temperatures.

POTENTIAL HEALTH EFFECTS

EYES: May cause irritation.

SKIN: May cause irritation and possible allergic sensitivity with repeated contact.

INGESTION: May be harmful if swallowed.

INHALATION: May be harmful if inhaled. Inhalation at levels above the occupational exposure limit could cause respiratory sensitization and risk of serious damage to the respiratory system. The onset of the respiratory symptoms may be delayed for several hours after exposure. A hyper-reactive response to even minimal concentrations of diisocyanates may develop in sensitized persons.

MEDICAL CONDITIONS AGGRAVATED: May cause or aggravate dermatitis and asthma.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt.%	CAS
Polypropylene glycol polymer 1,3 diisocyanatomethylbenzene terminated	> 99.9	9057-91-4
Toluene Diisocyanate	< 0.1	26471-62-5

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. Consult a physician.

SKIN: Immediately wash skin with soap and plenty of water. Remove contaminated clothing. Get medical attention if symptoms occur. Wash clothing before reuse.

INGESTION: If swallowed, call a physician immediately. Do NOT induce vomiting. Provided the patient is conscious, wash out mouth with water. Never give anything by mouth to an unconscious person.

INHALATION: Remove patient from exposure, keep warm and at rest. Obtain immediate medical attention. Treatment is symptomatic for primary irritation or bronchospasm. If breathing is labored, oxygen should be administered by qualified personnel. Apply artificial respiration

ST-1060 PART A

if breathing has ceased or shows signs of failing.

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

FLASHPOINT AND METHOD: 174°C (345°F) Pinsky-Martens CC

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

EXPLOSION HAZARDS: Avoid contact with strong oxidizers and strong acids, as sudden reaction may result in fire and toxic fumes. Reacts slowly with water to produce carbon dioxide which may rupture closed containers. This reaction accelerates at higher temperatures.

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).

RELEASE NOTES: US regulations require reporting spills of this material that could reach any surface waters. The toll free number for the US Coast Guard National Response Center is (800) 424-8802.

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 cool, dry 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.

SHELF LIFE: 6 months from date of shipment under manufacturers recommended storage conditions.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION**EXPOSURE GUIDELINES**

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)							
		EXPOSURE LIMITS					
		OSHA PEL		ACGIH TLV		Supplier OEL	
Chemical Name		ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³
Polypropylene glycol polymer 1,3 diisocyanatomethylbenzene terminated	TWA	NE	NE	NE	NE	NE	NE
	STEL	NE	NE	NE	NE	NE	NE
Toluene Diisocyanate	TWA	NE	NE	NE	NE	NE	NE
	STEL	NE	NE	NE	NE	NE	NE

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: None required in normal use. For grinding operations, safety goggles or glasses are recommended. ANSI Z87.1 or

ST-1060 PART A

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: Viscous liquid

ODOR: Slight

APPEARANCE: Clear

COLOR: Pale yellow

pH: Not Applicable

PERCENT VOLATILE: Nil

VAPOR PRESSURE: < 1 mmHg at 20°C (68°F)

VAPOR DENSITY: Not Established

BOILING POINT: > 250°C (482°F)

FLASHPOINT AND METHOD: 174°C (345°F) Pensky-Martens CC

SOLUBILITY IN WATER: Reacts slightly with water

SPECIFIC GRAVITY: 1.080 (water=1) at 25°C (77°F)

VISCOSITY: 10000 Centipoise at 25°C (77°F)

VOC (Volatile Organic Compound): Nil Calculated. Theoretical VOC minus water and exempt solvents.

10. STABILITY AND REACTIVITY

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

POLYMERIZATION: Product may foam when exposed to heat and moisture.

CONDITIONS TO AVOID: High temperatures, moisture, and freezing conditions.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, carbon dioxide, nitrous oxide, and HCN.

INCOMPATIBLE MATERIALS: Moisture, strong acids, amines, and metal carboxylates.

11. TOXICOLOGICAL INFORMATION**TOXICITY TO ANIMALS**

Chemical Name	ORAL LD ₅₀ (rat)	DERMAL LD ₅₀ (rabbit)	INHALATION LC ₅₀ (rat)
Polypropylene glycol polymer 1,3 diisocyanatomethylbenzene terminated	Not Established	Not Established	Not Established
Toluene Diisocyanate	Not Established	Not Established	0.099 mg/l (4 h)

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.

ST-1060 PART A**13. DISPOSAL CONSIDERATIONS**

DISPOSAL METHOD: The generation of waste should be avoided or minimized wherever possible. Disposal should be in accordance with local, state, provincial or national regulations.

EMPTY CONTAINER: Containers must be emptied (as defined by RCRA, 40 CFR Section 261.7 or state regulations that may be more stringent) and either passed to an approved recycler or destroyed.

14. TRANSPORT INFORMATION**DOT (DEPARTMENT OF TRANSPORTATION) LAND**

NOTE: 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: None

313 REPORTABLE INGREDIENTS: This product contains the following 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:

EPCRA SECTION 313 SUPPLIER NOTIFICATION

Chemical Name	Wt.%	CAS
Toluene Diisocyanate	< 0.1	26471-62-5

CERCLA (COMPREHENSIVE 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
Toluene Diisocyanate	< 0.1	100

TSCA (TOXIC SUBSTANCE CONTROL ACT)

TSCA STATUS: All ingredients in this mixture are in compliance with TSCA.

CLEAN AIR ACT

Chemical Name	Wt.%	CAS
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.

REGULATIONS

STATE REGULATIONS: California Proposition 65: This product contains chemical(s) which are known to the State of California to cause cancer, birth defects or other reproductive harm, and may be subject to the requirements of California Proposition 65 (CA Health & Safety Code Section 25249.5):

CALIFORNIA PROPOSITION 65

Chemical Name	Wt.%	Listed
Toluene Diisocyanate	< 0.1	Cancer

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

ST-1060 PART A**CANADA****WHMIS HAZARD SYMBOL AND CLASSIFICATION**

Toxic
D2A
D2B

WHMIS (WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM): This product has been classified according to the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

DOMESTIC SUBSTANCE LIST (INVENTORY): All components in this product are included on the Domestic Substances List (DSL) or the Non-Domestic Substances List (NDSL).

EUROPEAN COMMUNITY**EEC LABEL SYMBOL AND CLASSIFICATION**

"Xn" - Harmful

RISK PHRASES

R20: Harmful by inhalation.
R36/37/38: Irritating to eyes, respiratory system and skin.
R40: Limited evidence of a carcinogenic effect.
R42/43: May cause sensitization by inhalation and skin contact.

SAFETY PHRASES

S23: Do not breathe fumes/vapour.
S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36/37: Wear suitable protective clothing and gloves.
S38: In case of insufficient ventilation, wear suitable respiratory equipment.
S45: In case of accident or if you feel unwell, seek medical advice immediately.

16. OTHER INFORMATION

REASON FOR ISSUE: Revision

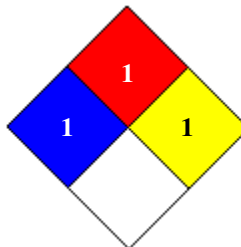
APPROVED BY: Michael Rose **TITLE:** R & D Manager

PREPARED BY: Gus Alidad

REVISION SUMMARY: This MSDS replaces the 11/30/2006 MSDS. Revised: **Section 1:** REASON FOR ISSUE. **Section 3:** Wt.%. **Section 8:** ENGINEERING CONTROLS, PERSONAL PROTECTIVE EQUIPMENT - SKIN WORK HYGIENIC PRACTICES. **Section 9:** PERCENT VOLATILE, VOC (Volatile Organic Compound). **Section 15:** CERCLA REGULATORY, 313 REPORTABLE INGREDIENTS, WHMIS (WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM).

HMIS RATING

HEALTH	<input type="checkbox"/>	1
FLAMMABILITY	<input type="checkbox"/>	1
PHYSICAL HAZARD	<input type="checkbox"/>	1
PERSONAL PROTECTION	<input checked="" type="checkbox"/>	X

NFPA CODES

HMIS RATINGS NOTES: Personal Protection: See Section 8

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