# SAFETY DATA SHEET



**Date Prepared:** 08/09/2016

SDS No: MD-60 REV 1 PART A

# MD-60 REV 1 PART A

# 1. PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** MD-60 REV 1 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**

This product does not meet the criteria for classification.

# 3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt.%	CAS
Polyurethane prepolymer	60 - 100	Proprietary
Hexane, 1,6-diisocyanato-, homopolymer	5 - 10	28182-81-2
Toluene Diisocyanate	< 0.09	26471-62-5
Hexamethylene-1,6-diisocyanate	< 0.03	822-06-0

# 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. Seek medical attention if breathing becomes difficult or if respiratory irritation develops.

**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, and hydrogen cyanide.

**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 COMPONENT	ΓS (29 CFR1910.1200)			
	EXPO	SURE LIM	1ITS	
Chemical Name	Туре		ppm	mg/m <sup>3</sup>
	OSHA PEL	TWA	NE	NE
	OSHA PEL	STEL	NE	NE
Polyurethane prepolymer	ACGIH TLV	TWA	NE	NE
Poryurethane preporymen	ACGIH TLV	STEL	NE	NE
	Supplier OEL	TWA	NE	NE
	Supplier OEL	STEL	NE	NE
	OSHA PEL	TWA	NE	NE
	OSHATEL	STEL	NE	NE
Hexane, 1,6-diisocyanato-, homopolymer	ACGIH TLV	TWA	NE	NE
Thexame, 1,0-unsocyanato-, nomopolymer	ACGIII I LV	STEL	NE	NE
	Supplier OEL	TWA	NE	NE
	Supplier OEL	STEL	NE	NE
	OSHA PEL	TWA	NE	NE
	OSHA PEL	STEL	NE	NE
Toluene Diisocyanate	ACGIH TLV	TWA	0.005	NE
Toldelle Difsocyanate	ACGIII I LV	STEL	0.02	NE
	Supplier OEL	TWA	NE	NE
	Supplier OEL	STEL	NE	NE
OSHA PEL		TWA	NE	NE
	OSHA FEL	STEL	NE	NE
	ACGIH TLV	TWA	0.005	0.035
Hexamethylene-1,6-diisocyanate	ACGIH ILV	STEL	NE	NE
	Supplier OEL	TWA	0.005 [1]	0.035 [1]
	Supplier OEL	STEL	NE	NE
Footnotes: 1. NIOSH REL				

**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: Viscous liquid

ODOR: Slight

**COLOR:** Pale yellow **pH:** Not Applicable

**PERCENT VOLATILE: 0.01** 

FLASH POINT AND METHOD: > 104.4°C (220°F) Pensky-Martens CC

**VAPOR PRESSURE:**  $< 1 \text{ mmHg at } 21^{\circ}\text{C } (70^{\circ}\text{F})$ 

**VAPOR DENSITY:** Not Established **BOILING POINT:** > 250°C (482°F)

**SOLUBILITY IN WATER:** Reacts slightly with water **SPECIFIC GRAVITY:** 1.103 (water=1) at 25°C (77°F)

**VISCOSITY #1:** 4500 Centipoise at 25°C (77°F)

(VOC): < 0.12 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: Reaction with water produces carbon dioxide.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, carbon dioxide, nitrogen oxides, and hydrogen cyanide.

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

# 11. TOXICOLOGICAL INFORMATION

### ACUTE TOXICITY

Chemical Name	ORAL LD <sub>50</sub>	DERMAL LD <sub>50</sub>	INHALATION LC <sub>50</sub>
Polyurethane prepolymer	Not Established	Not Established	Not Established
Hexane, 1,6-diisocyanato-, homopolymer	> 5000 mg/kg	> 5000 mg/kg	390 to 453 mg/m3 (4 h)
Toluene Diisocyanate	Not Established	Not Established	0.099 mg/l (4 h)
Hexamethylene-1,6-diisocyanate	746 to 959 mg/kg	599 mg/kg	124 mg/m3 (4 h)

SKIN CORROSION/IRRITATION: No data available.

**SERIOUS EYE DAMAGE/IRRITATION:** No data available.

**RESPIRATORY OR SKIN SENSITISATION:** No data available.

GERM CELL MUTAGENICITY: No data available.

**CARCINOGENICITY** 

Chemical Name	NTP Status	IARC Status	
Toluene Diisocyanate	2	2B	

REPRODUCTIVE TOXICITY: No data available.
STOT-SINGLE EXPOSURE: No data available.
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: None Known

**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
Toluene Diisocyanate	< 0.09	100 lbs.
Hexamethylene-1,6-diisocyanate	< 0.03	100 lbs.

### TSCA (TOXIC SUBSTANCE CONTROL ACT)

TSCA REGULATORY: This product does not contain any chemicals 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	< 0.09	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:** 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):

Chemical Name	Wt.%	Listed
Toluene Diisocyanate	< 0.09	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).

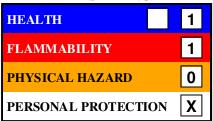
**GENERAL COMMENTS:** No data available.

#### 16. OTHER INFORMATION

**REASON FOR ISSUE:** New Issue

**Date Prepared:** 08/09/2016

**HMIS RATING** 





HMIS RATINGS NOTES: Personal Protection: See Section 8

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