

# MATERIAL SAFETY DATA SHEET



**Date Issued:** 05/08/2006  
**MSDS No:** TC-890 FR Part B  
**Date-Revised:** 05/08/2006  
**Revision No:** New MSDS

## TC-890 FR Part B

### 1. PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** TC-890 FR Part B  
**GENERAL USE:** Polyurethane curing agent  
**CHEMICAL FAMILY:** Polyoxyalkylene glycols, plasticizer mixture with dispersed fillers

#### MANUFACTURER

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

#### 24 HR. EMERGENCY TELEPHONE NUMBERS

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

### 2. HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW

**PHYSICAL APPEARANCE:** White liquid with a slight odor.

**IMMEDIATE CONCERNS:** Avoid eye and skin contact. Avoid breathing vapors. May cause eye and skin irritation. Use in well ventilated areas.

#### 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 result in respiratory irritation.

**MEDICAL CONDITIONS AGGRAVATED:** No data is available.

**ROUTES OF ENTRY:** Eye and skin contact, inhalation of vapors, or accidental ingestion.

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

<u>Chemical Name</u>	<u>Wt. %</u>	<u>CAS</u>
Polyoxyalkylene glycols	30 - 50	Proprietary
1,2-Benzenedicarboxylic acid	15 - 25	Proprietary
Decabromodiphenyl oxide	< 20	001163-19-5
Zinc borate	< 10	001332-07-6
Antimony trioxide	< 10	001309-64-4
Arsenic	< 0.025	007440-38-2
Lead	< 0.025	007439-92-1

### 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. Have eyes examined and tested by medical personnel.

**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. Remove stomach contents by gastric suction or induce vomiting only as directed by medical personnel. Never give anything by mouth to an unconscious person.

**INHALATION:** Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Seek 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

**FLASHPOINT AND METHOD:** 182°C (360°F) Pensky-Martens CC

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

**HAZARDOUS COMBUSTION PRODUCTS:** None

**FIRE FIGHTING PROCEDURES:** Cool fire exposed containers with water spray. Remove containers from 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 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)**

<u>Chemical Name</u>	<u>EXPOSURE LIMITS</u>						
	<u>OSHA PEL</u>		<u>ACGIH TLV</u>		<u>SUPPLIER OEL</u>		
	<u>ppm</u>	<u>mg/m<sup>3</sup></u>	<u>ppm</u>	<u>mg/m<sup>3</sup></u>	<u>ppm</u>	<u>mg/m<sup>3</sup></u>	
Polyoxyalkylene glycols	TWA -	NE	NE	NE	NE	NE	NE
	STEL -	NE	NE	NE	NE	NE	NE
1,2-Benzenedicarboxylic acid	TWA -	NE	NE	NE	NE	NE	NE
	STEL -	NE	NE	NE	NE	NE	NE
Decabromodiphenyl oxide	TWA -	NE	5	NE	5	NE	NE
	STEL -	NE	NE	NE	NE	NE	NE
Zinc borate	TWA -	NE <sup>[1]</sup>	15*,5 <sup>^</sup> <sup>[1]</sup>	NE	10	NE <sup>[2]</sup>	10 <sup>[2]</sup>
	STEL -	NE	NE	NE	NE	NE	NE
Antimony trioxide	TWA -	NE	0.5 as Sb	NE	0.5 as Sb	NE	NE
	STEL -	NE	NE	NE	NE	NE	NE
Arsenic	TWA -	NE	0.01	NE	0.01	NE <sup>[3]</sup>	0.002 <sup>[3]</sup>
	STEL -	NE	NE	NE	NE	NE	NE
Lead	TWA -	NE	0.05	NE	0.05	NE <sup>[3]</sup>	0.05 <sup>[3]</sup>
	STEL -	NE	NE	NE	NE	NE	NE

**OSHA TABLE COMMENTS:**

1. \* = Total dust, ^ = Respirable fraction
2. Cal OSHA/PEL
3. NIOSH REL

**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:** Impermeable gloves. Employees should wash their hands and face before eating, drinking, or using tobacco products.

**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.

**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

**APPEARANCE:** Opaque

**COLOR:** White

**pH:** Not Established

**PERCENT VOLATILE:** 2

**VAPOR PRESSURE:** Not Established

**VAPOR DENSITY:** Not Established

**BOILING POINT:** Not Established

**SOLUBILITY IN WATER:** Slightly soluble

**SPECIFIC GRAVITY:** 1.330 (water=1) at 25°C (77°F)

**VISCOSITY:** 2700 Centipoise at 25°C (77°F)

**(VOC):** 27.000 g/l Reference EPA Method 24

## 10. STABILITY AND REACTIVITY

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

**POLYMERIZATION:** Product will not undergo polymerization.

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

**INCOMPATIBLE MATERIALS:** Isocyanates, oxidizing agents, and strong mineral acids.

## 11. TOXICOLOGICAL INFORMATION

### TOXICITY TO ANIMALS:

Chemical Name	ORAL LD <sub>50</sub> (rat)	DERMAL LD <sub>50</sub> (rabbit)	INHALATION LC <sub>50</sub> (rat)
Polyoxyalkylene glycols	Not Established	Not Established	Not Established
1,2-Benzenedicarboxylic acid	Not Established	Not Established	Not Established
Decabromodiphenyl oxide	> 5000 mg/kg	Not Established	Not Established
Zinc borate	> 10000 mg/kg	> 10000 mg/kg	Not Established
Antimony trioxide	> 34600 mg/kg	> 2000 mg/kg	Not Established
Arsenic	763 mg/kg	Not Established	Not Established
Lead	Not Established	Not Established	Not Established

## 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.

**ECOTOXICITY:** Not Established

## 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, Section 261.7 or state regulation 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)

**NOTE:** Not Regulated

### VESSEL (IMO/IMDG)

**NOTE:** Not Regulated

## 15. REGULATORY INFORMATION

**UNITED STATES****SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)**

**311/312 HAZARD CATEGORIES:** Acute health hazard. Chronic health hazard

**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 CFR Part 372:

**EPCRA SECTION 313 SUPPLIER NOTIFICATION**

Chemical Name	Wt. %	CAS
Decabromodiphenyl oxide	< 20	001163-19-5
Zinc borate	< 10	001332-07-6
Antimony trioxide	< 10	001309-64-4
Lead	< 0.025	007439-92-1

**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
Zinc borate	< 10	1000 lbs.
Antimony trioxide	< 10	1000 lbs.
Arsenic	< 0.025	1 lbs.
Lead	< 0.025	10 lbs.

**TSCA (TOXIC SUBSTANCE CONTROL ACT)**

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

**OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA)**

**29 CFR 1910.119---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
Antimony trioxide	< 10	● Cancer
Arsenic	< 0.025	● Cancer
Lead	< 0.025	● Developmental Toxicity ● Female Reproductive ● Male Reproductive

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

**16. OTHER INFORMATION**

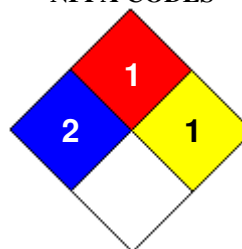
**REASON FOR ISSUE:** New Issue

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

**PREPARED BY:** Gus Alidad

**REVISION SUMMARY:** New MSDS**HMIS RATING**

<b>HEALTH:</b>	*	<b>2</b>
<b>FLAMMABILITY:</b>		<b>1</b>
<b>REACTIVITY:</b>		<b>1</b>
<b>PERSONAL PROTECTION:</b>	<b>X</b>	

**NFPA CODES**

**HMIS RATINGS NOTES:** Personal Protection: See Section 8

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