

# Material Safety Data Sheet

TC-9460 PART B

Date of Preparation: 04/25/2005

Revision: 04/25/2005

## Section 1 - Chemical Product and Company Identification

**Product Name:** TC-9460 PART B

**Product Class:** Polyurethane curing agent

**Chemical Type:** Aromatic diamine plasticizer, blend

**Manufacturer:** BJB Enterprises, Inc., 14791 Franklin Avenue, Tustin, CA 92780, Phone (714) 734-8450, Fax (714) 734-8929, (M-Th: 8-4:30, F: 7:30-4), Emergency Phone: Chemtrec (800) 424-9300 or (703) 527-3887

## Section 2 - Composition / Information on Ingredients

Ingredient Name	CASRN	% wt
1. 1,2 Benzenedicarboxylic acid, dibutyl ester	84-74-2	50-55
2. Benzenamine, 4,4' - methylenbis [2-ethyl-	19900-65-3	40-50
3. Polyether Polyol	Proprietary	10-20

## Section 3 - Hazards Identification

### ☆☆☆☆☆ Emergency Overview ☆☆☆☆☆

Appearance: Dark brown liquid; Odor: Sweet odor; Avoid skin contact. Avoid breathing vapors. May cause eye and skin irritation. Harmful if inhaled. Use in well-ventilated areas. Burning material will generate trace amounts of toxic fumes/gases.

### HMIS

H 2

F 1

R 0

PPE†

†Sec. 8

### Potential Health Effects

**Primary Entry Routes:** Eye and skin contact; inhalation of vapors, accidental ingestion.

**Inhalation/Ingestion:** Excessive vapors caused by heat or spray mist can cause respiratory problems/Possible gastric irritation.

**Eye:** May cause irritation and redness.

**Skin:** May cause irritation, dryness and possible allergic sensitivity with repeated contact.

**Medical Conditions Aggravated by Long-Term Exposure:** None known

## Section 4 - First Aid Measures

**Inhalation:** Not likely. Remove to fresh air environment.

**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.

**Eye Contact:** Flush eyes with clean, lukewarm water for 15 minutes. Obtain medical attention if irritation develops.

**Skin Contact:** Remove contaminated clothing and wash affected areas well with soap and water. Launder contaminated clothing before use.

**Note to Physicians:** Treat any ill effects symptomatically.

## Section 5 - Fire-Fighting Measures

**Flash Point/Method:** >360°F (182°C) Closed cup

**Extinguishing Media:** Water spray, foam, or dry chemical extinguisher.

**Unusual Fire or Explosion Hazards:** Low; can react with strong oxidizing materials.

**Fire-Fighting Instructions:** 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.



## Section 6 - Accidental Release Measures

**Spill /Leak Procedures:** Provide adequate ventilation and wear personal protective equipment. Evacuate personnel as a precaution. Prevent product spill from entering sewers, streams, or drinking water supplies. Collect liquid or soak up with inert filler or an absorbent, such as dry earth, sand, or oil absorbent (sweeping) compound. Collect material into suitable containers for disposal. Wash area with dilute ammonia solution.

**Containment:** For large spills, dike ahead of liquid spill for later neutralization, absorption, clean up, and disposal.

## Section 7 - Handling and Storage

**Handling Precautions:** Avoid contact with eyes, skin and clothing. Avoid breathing vapor over open container.

**Storage Requirements:** Store in a cool, dry place away from excessive heat in original or similar waterproof containers. 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.

## Section 8 - Exposure Controls / Personal Protection

**Exposure Limits:**

1,2 Benzenedicarboxylic acid, dibutyl ester (84-74-2):

OSHA PEL (TWA): 5 mg/m<sup>3</sup>

ACGIH TLV (TWA): 5 mg/m<sup>3</sup>

NIOSH (REL): 5 mg/m<sup>3</sup>

Benzenamine, 4,4'-methylenbis [2-ethyl]- (19900-65-3):

Not established

Polyether Polyol (Proprietary):

Not established

**Eye Protection Requirements:** Safety goggles or glasses are recommended. Plastic face shield should be worn for complete face protection.

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

**Ventilation/Respiratory Requirements:** Exhaust ventilation recommended. An organic vapor cartridge or fresh air supplied respirator (NIOSH certified) 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).

**Additional Protective Measures:** Safety showers and eye wash stations should be easily accessible to the work area. Training is important. Follow all label precautions.

## Section 9 - Physical and Chemical Properties

**Flash Point/Method:** >360°F (182°C) Closed cup

**Physical State:** Liquid

**Appearance and Odor:** Dark brown; Sweet odor

**Vapor Pressure:** <5 mm Hg @ 68°F (20°C)

**Specific Gravity (H<sub>2</sub>O=1):** 1.06

**pH:** N/A

**Water Solubility:** Slightly soluble

**Boiling Point:** >400°F (204°C)

**Viscosity:** 130 cps

**% Volatile:** <0.03

**V.O.C. (ref EPA meth 24):** 0.3 g/l

## Section 10 - Stability and Reactivity

**Stability:** Stable at room temperature in closed containers under normal storage and handling conditions.

**Polymerization:** Hazardous polymerization will not occur.

**Chemical Incompatibilities/Conditions to Avoid:** isocyanates, oxidizers, and mineral acids.

**Hazardous Decomposition:** None known

## Section 11- Toxicological Information

### Animal Toxicity:

- 1,2 Benzenedicarboxylic acid, dibutyl ester (84-74-2):  
 LD50 Oral (rat): 20,000-25,000 mg/kg  
 LD50 Dermal (guinea pig): >2,096 mg/kg, >2 ml/kg (highest dose tested)  
 LD50 Dermal (rabbit): >20,960 mg/kg, >20 ml/kg (highest dose tested)  
 Skin Irritation (guinea pig): slight  
 Skin Irritation (rabbit): none  
 Skin Irritation (human): slight
- Benzenamine, 4,4'-methylenbis [2-ethyl- (19900-65-3):  
 Not established
- Polyether Polyol (Proprietary):  
 Not established

## Section 12 - Ecological Information

### Ecotoxicity:

- 1,2 Benzenedicarboxylic acid, dibutyl ester (84-74-2):  
 LC50 (96 h) fathead minnow: 0.92 mg/l, NOEC: 0.32 mg/l  
 LC50 (96 h) rainbow trout: 1.6 mg/l, NOEC: 0.5 mg/l  
 LC50 (96 h) sheepshead minnow: >0.6 mg/l, NOEC: 0.6 mg/l  
 LC50 (96 h) bluegill sunfish: 0.48 mg/l, NOEC: 0.42 mg/l  
 EC50 (48 h) daphnid: 3.0 mg/l, NOEC: 1.7 mg/l
- Benzenamine, 4,4'-methylenbis [2-ethyl- (19900-65-3):  
 Very toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.
- Polyether Polyol (Proprietary):  
 Not established

## Section 13 - Disposal Considerations

**Waste Disposal Method:** Dispose of in compliance with federal, state, or local environmental control regulations.

## Section 14 - Transport Information

**DOT**  
Not regulated

**IATA/ICAO**  
Not regulated

**IMO/IMDG**  
Not regulated

## Section 15 - Regulatory Information

### U.S. Federal Regulations:

#### OSHA:

This document has been prepared in accordance with the MSDS requirements of the OSHA Hazard Communication Standard.

#### SARA TITLE III:

Sections 311/312 Hazard Classification:  
 Delayed (Chronic) Health Hazard

Section 313: This product contains the following substances subject to the reporting requirements of EPCRA, Section 313 and 40 CFR Part 372:

1,2 Benzenedicarboxylic acid, dibutyl ester	CAS number 84-74-2	55% (max.) by weight
---	--------------------	----------------------

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

This product contains the following substances subject to export notification under Section 12 (b) of TSCA:

None

**Section 16 - Other Information**

**Reason for Issue:** Revised Section 9

**Prepared By:** M. Rose

**Approval Date:** 04/25/2005

**Supersedes Date:** 04/04/2005

**Disclaimer:** This information is furnished without warranty, expressed or implied, except that it is accurate to the best knowledge of BJB Enterprises, Inc. The data on this sheet relates only to the specific material designated herein. BJB Enterprises, Inc. assumes no legal responsibility for use or reliance upon these data.