

# Material Safety Data Sheet

PC-10 PART A

Date of Preparation: 09/08/2003

Revision: 09/08/2003

## Section 1 - Chemical Product and Company Identification

**Product Name:** PC-10 PART A

**Product Class:** Polyurethane resin

**Chemical Type:** Aromatic diisocyanate adducted glycol mixture in phthalate ester

**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 Alkyl esters, Dicarboxylic acid mixture	Proprietary	<70%
2. Diphenylmethane-diisocyanate MDI	101-68-8	<20%

**Trace Impurities:** N/A

Ingredient	OSHA PEL		ACGIH TLV		NIOSH REL		NIOSH IDLH
	TWA	STEL	TWA	STEL	TWA	STEL	
#1	NE	NE	NE	NE	NE	NE	NE
#2	0.02 ppm	NE	0.005 ppm	NE	NE	NE	NE

## Section 3 - Hazards Identification

### ☆☆☆☆ Emergency Overview ☆☆☆☆

Appearance: Clear to translucent liquid; May cause skin and eye irritation; Avoid contact with oxidizers and strong acids as reaction may produce heat and toxic fumes/gases.

**HMIS**  
**H** 2  
**F** 1  
**R** 1  
**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.

**Eye:** May cause irritation.

**Skin:** Possible irritation on prolonged exposure.

**Medical Conditions Aggravated by Long-Term Exposure:** Previous sensitization (skin) and asthmatic disorders may be aggravated by diisocyanate exposure.

## 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:** >350°F (177°C) T.C.C.

**Autoignition Temperature:** N/A

**Flammability Classification:** N/A

**Extinguishing Media:** Water spray, carbon dioxide, dry chemical or alcohol foam.

**Unusual Fire or Explosion Hazards:** Avoid contact with strong oxidizers and strong acids as reaction may produce heat and toxic fumes/gases.

**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. Avoid extensive exposure to damp air. Avoid pressure build up. Vent slowly.

**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. Store product under inert atmosphere.

**Shelf life:** 6 months from the date of shipment under manufacturers recommended storage conditions.

### Section 8 - Exposure Controls / Personal Protection

**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 Requirements:** Mechanical ventilation preferred. Cross draft is satisfactory.

**Respiratory Requirements:** An organic vapor cartridge or fresh air supplied respirator may be necessary in a closed room or area. 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. Working training is important. Follow all label precautions.

### Section 9 - Physical and Chemical Properties

**Physical State:** Liquid

**Appearance:** Clear to translucent

**Vapor Pressure:** Extremely low

**Specific Gravity (H<sub>2</sub>O=1):** 1.02

**pH:** N/A

**Water Solubility:** Reacts very slowly; slightly soluble

**Boiling Point:** >482°F (250°C) @ 10mm Hg

**% Volatile:** Negligible

**V.O.C. (ref EPA meth 24):** None

### 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:** Moisture, acids and amines.

**Hazardous Decomposition:** Thermal oxidative decomposition can produce toxic fumes/gases.

### Section 11- Toxicological Information

No Toxicological Information Available

### Section 12 - Ecological Information

No Ecological Information Available

### Section 13 - Disposal Considerations

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

**Section 14 - Transport Information**

DOT  
Not regulated

IATA/IACO  
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:

Diphenylmethane-diisocyanate MDI      CAS# 101-68-8      20% (max)

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

None

**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:** New Issue

**Prepared By:** M. Rose

**Approval Date:** 09/08/2003

**Supersedes Date:** N/A

**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.

# Material Safety Data Sheet

PC-10 PART B

Date of Preparation: 09/08/2003

Revision: 09/08/2003

## Section 1 - Chemical Product and Company Identification

**Product Name:** PC-10 PART B

**Product Class:** Polyurethane curing agent

**Chemical Type:** Polybutadiene polyol mixture in ester

**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. Hydroxy terminated polybutadiene	69102-90-5	<60
2. Alkyl diester	103-23-1	<40
3. 4-Vinylcyclohexene	100-40-3	<0.05 (trace)

Trace Impurities: N/A

Ingredient	OSHA PEL		ACGIH TLV		NIOSH REL		NIOSH IDLH
	TWA	STEL	TWA	STEL	TWA	STEL	
#1	NE	NE	NE	NE	NE	NE	NE
#2	NE	NE	NE	NE	NE	NE	NE
#3	NE	NE	0.1	NE	NE	NE	NE

## Section 3 - Hazards Identification

### ☆☆☆☆☆ Emergency Overview ☆☆☆☆☆

Appearance: Colorless liquid; Odor: Slight ester; Avoid skin contact. Avoid breathing vapors. May cause eye and skin irritation. Harmful if inhaled. Use in well-ventilated areas.

### HMIS

H 1

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.

**Eye:** May cause irritation.

**Skin:** May cause irritation 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:** 370°F (188°C) C.O.C.

**Autoignition Temperature:** N/A

**Flammability Classification:** N/A

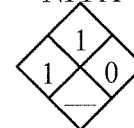
**Extinguishing Media:** Water spray, carbon dioxide or dry chemical extinguisher.

**Unusual Fire or Explosion Hazards:** Low; can react with strong oxidizing material such as sulfuric acid or permanganates.

**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.

NFPA



### 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. Avoid extensive exposure to air or high heat.

**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 the date of shipment under manufacturers recommended storage conditions.

### Section 8 - Exposure Controls / Personal Protection

**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 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

**Physical State:** Liquid

**Appearance and Odor:** Colorless; slight ester

**Vapor Pressure:** <1 mm Hg

**Specific Gravity (H<sub>2</sub>O=1):** 0.91

**pH:** N/A

**Water Solubility:** Insoluble

**Boiling Point:** >392°F (200°C) @ 10 mm Hg

**% Volatile:** Negligible

**V.O.C. (ref EPA meth 24):** None

### 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:** N/A

### Section 11- Toxicological Information

No Toxicological Information Available

### Section 12 - Ecological Information

No Ecological Information Available

### Section 13 - Disposal Considerations

**Waste Disposal Method:** Controlled incineration landfill burial unless prohibited. 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:

None

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

None

**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:** New issue

**Prepared By:** M. Rose

**Approval Date:** 09/08/2003

**Supersedes Date:** N/A

**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.