

# Material Safety Data Sheet

F-25 PART A

Date of Preparation: 08/11/2005

Revision: 08/11/2005

## Section 1 - Chemical Product and Company Identification

**Product Name:** F-25 PART A

**Product Class:** Isocyanate-terminated prepolymer

**Chemical Type:** Polyoxypropylene glycol, aromatic diisocyanate terminated

**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. Poly (oxy(methyl-1,2-ethanediyl)), alpha-hydro-omega-hydroxy-, polymer	9057-91-4	>99.9
2. Toluene-2,6-diisocyanate	91-08-7	<0.06
3. Toluene-2,4-diisocyanate	584-84-9	<0.04

## Section 3 - Hazards Identification

### ☆☆☆☆☆ Emergency Overview ☆☆☆☆☆

Appearance: Viscous, amber liquid. May cause irritation to skin and eyes. Avoid contact with strong oxidizers and strong acids as sudden reaction may result in fire and toxic fumes.

### HMIS

H 1

F 1

R 1

PPE†

†Sec. 8

### Potential Health Effects

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

**Inhalation:** Not likely. Excessive vapors caused by heat or spray mist can cause respiratory problems.

**Ingestion:** Not likely.

**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

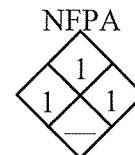
**Flash Point/Method:** >320°F (160°C) closed cup

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

**Unusual Fire or Explosion Hazards:** Avoid contact with strong oxidizers and strong acids, as sudden reaction may result in fire and toxic fumes.

**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 skin, eyes and clothing. Avoid breathing vapor over open container. Moderate irritant in prolonged contact. Avoid moisture exposure.

**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 date of shipment under manufacturers recommended storage conditions.

### Section 8 - Exposure Controls / Personal Protection

**Exposure Limits:**

Poly(oxy(methyl-1,2-ethanediyl)), alpha-hydro-omega-hydroxy-, polymer (9057-91-4):  
Not established

Toluene-2,6-diisocyanate (91-08-7):  
Not established

Toluene-2,4-diisocyanate (584-84-9):  
OSHA PEL (TWA): 0.005 ppm, 0.04 mg/m<sup>3</sup>  
OSHA PEL (STEL): 0.02 ppm, 0.15 mg/m<sup>3</sup>  
ACGIH TLV (TWA): 0.005 ppm, 0.005 mg/m<sup>3</sup>  
ACGIH TLV (STEL): 0.02 ppm, 0.14 mg/m<sup>3</sup>  
ACGIH TLV (CEILING): 0.02 mg/m<sup>3</sup>

**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:** Exhaust ventilation recommended.

**Respiratory Requirements:** An organic vapor cartridge or fresh air supplied respirator is recommended in closed rooms or areas. 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

**Flash Point/Method:** >320°F (160°C) closed cup

**Physical State:** Viscous liquid

**Appearance and Odor:** Amber, odorless

**Vapor Pressure:** <1mm Hg at 70°F (21°C)

**Vapor Density (Air=1):** N/A

**Specific Gravity (H<sub>2</sub>O=1):** 1.05

**pH:** N/A

**Water Solubility:** Reacts slightly with water

**Other Solubilities:** N/A

**Boiling Point:** >482°F (250°C)

**Freezing/Melting Point:** N/A

**Viscosity:** 3,700 cps @ 77°F (25°C)

**% Volatile:** None

**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. Avoid contact with strong oxidizers and strong acids as sudden reaction may result in fire and toxic fumes.

**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/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

**State Regulations:**

California Proposition 65: This product contains chemical(s) known to the State of California to cause cancer and/or to cause birth defects or other reproductive harm.

Toluene-2,6-diisocyanate

Toluene-2,4-diisocyanate

**Section 16 - Other Information**

**Reason for Issue:** Revised sections 2, 8, 9 & 15

**Prepared By:** M. Rose

**Approval Date:** 08/11/2005

**Supersedes Date:** 04/16/2001

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# Material Safety Data Sheet

F-25 PART B

Date of Preparation: 04/16/2001

Revision: 04/16/2001

## Section 1 - Chemical Product and Company Identification

**Product Name:** F-25 PART B

**Product Class:** Polyurethane curing agent

**Chemical Type:** Glycol/aromatic diamine solution in plasticizers

**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. Aromatic diamine	106264-79-3	5 - 10
2. Aryl mercuric carboxylate	27236-65-3	<0.5

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	0.1 mg/m <sup>3</sup>	NE	0.1 mg/m <sup>3</sup>	NE	NE	NE	NE

## Section 3 - Hazards Identification

### ☆☆☆☆☆ Emergency Overview ☆☆☆☆☆

Appearance: Slightly cloudy liquid; Odor: Sweet amine; Avoid skin contact. Avoid breathing vapors. May cause eye and skin irritation. Harmful if inhaled. Use in well-ventilated areas.

### HMIS

H 2

F 0

R 0

PPE<sup>†</sup>

<sup>†</sup>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:** Acute asthma.

## 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:** 300°F (149°C) SETA

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

**Unusual Fire or Explosion Hazards:** Low; Can react with 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

**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 or well-ventilated area 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

**Physical State:** Liquid

**Appearance and Odor:** Slightly cloudy; Sweet amine

**Vapor Pressure:** <1 mm Hg at 68°F (20°C)

**Specific Gravity (H<sub>2</sub>O=1):** 1.00

**pH:** N/A

**Water Solubility:** Slightly soluble

**Boiling Point:** >392°F (>200°C)

**Viscosity:** 250 cps

**% Volatile:** <3

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

### Section 10 - Stability and Reactivity

**Stability:** F-25 PART B is stable at room temperature in closed containers under normal storage and handling conditions.

**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:** Landfill burial or controlled incineration 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 Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 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:** Revised Section 7

**Prepared By:** S.F. Marks

**Approval Date:** 04/16/2001

**Supersedes Date:** 03/10/2000

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