

# Material Safety Data Sheet

## F-31 PART A

Date of Preparation: 12/02/2003

Revision: 12/02/2003

### Section 1 - Chemical Product and Company Identification

**Product Name:** F-31 PART A

**Product Class:** Polyurethane Resin

**Chemical Type:** Aromatic Diisocyanate

**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. Modified MDI	Not Listed	>60
2. 4,4' Diphenylmethane Diisocyanate (MDI)	101-68-8	<20
3. Chlorinated paraffin	63449-39-8	<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
#3	NE	NE	NE	NE	NE	NE	NE

### Section 3 - Hazards Identification

#### ☆☆☆☆☆ Emergency Overview ☆☆☆☆☆

Appearance: Light yellow, oily liquid; Odor: slight, sweet; Avoid skin contact. Avoid breathing vapors. May cause eye and skin irritation; May be harmful if inhaled; Use in well ventilated areas; Burning material will generate 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.

**Inhalation/Ingestion:** Not likely. Excessive vapors caused by heat or spray mist can cause respiratory problems. Ingestion may cause irritation to gastrointestinal tract. Considered practically non-toxic by ingestion.

**Eye:** May cause irritation, redness, tearing.

**Skin:** May cause irritation and possible allergic sensitivity, redness, or rash with repeated or long-term contact.

**Carcinogenicity:** The components of this product are not listed by NTP, IARC, or regulated as a carcinogen by OSHA.

**Medical Conditions Aggravated by Long-Term Exposure:** Pre-existing skin or respiratory disorders.

### Section 4 - First Aid Measures

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

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

**Inhalation:** Remove to fresh air environment. Administer oxygen if breathing is difficult.

**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.

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

### Section 5 - Fire-Fighting Measures

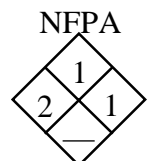
**Flash Point/Method:** 420°F (218°C) PMCC

**Extinguishing Media:** Foam, carbon dioxide, or water spray. (Dry chemical for class B fires).

**Unusual Fire or Explosion Hazards:** Burning material will generate toxic fumes/gases containing Nitrogen oxides, CO, CO<sub>2</sub> and traces of HCN. Closed containers, when exposed to high heat, may generate pressure and cause explosive rupture. Cool containers with water spray.

**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 open container exposure to damp air.

**Handling/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 mandatory. Plastic face shields may be worn for complete face protection.

**Skin Protection Requirements:** Impermeable gloves. 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. Work training is important. Follow all label precautions.

## Section 9 - Physical and Chemical Properties

**Physical State:** Oily liquid

**Appearance and Odor:** Light yellow; slight sweet

**Vapor Pressure:** @ 77°F (25°C) <.0001 mm Hg

**Vapor Density (Air=1):** 8.1 approx.

**Specific Gravity (H<sub>2</sub>O=1):** 1.12

**pH:** N/A

**Water Solubility:** Reacts with water slowly

**Boiling Point:** Not Determined

**Viscosity:** 2,300 cps

**% Volatile:** None

**V.O.C. (ref EPA meth 24):** Contains no VOC's

## Section 10 - Stability and Reactivity

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

**Hazardous Polymerization:** May occur under heating and exposure to incompatible chemicals.

**Chemical Incompatibilities/Conditions to Avoid:** Water, acids, strong bases, alcohols, amines, oxidizers/excessive heating. Exposure to damp air will cause some product deterioration and cloudiness.

**Hazardous Decomposition:** Thermal oxidative decomposition can produce Nitrogen oxides, CO, CO<sub>2</sub> and HCN.

## Section 11- Toxicological Information

**Eye Effects:** Irritation from exposure to liquid or aerosol.

**Skin Effects:** Moderate irritant. Repeated contact may induce sensitization.

**Mutagenicity:** None determined

**Teratogenicity:** None determined

## Section 12 - Ecological Information

No Ecological Information Available

## Section 13 - Disposal Considerations

**Waste Disposal Method:** Landfill burial unless prohibited. Dispose of in accordance with federal, state, or local environmental control regulations. Not a hazardous waste under RCRA CFR 261.

**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. This product is listed under OSHA (HCS) (29CFR 1910-1200).

**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:

4,4'-Diphenylmethane Diisocyanate (MDI)                      CAS Number 101-68-8                      20% (max)

**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:** 3 year review

**Prepared By:** M. Rose

**Approval Date:** 12/02/2003

**Supersedes Date:** 11/20/2001

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