

MATERIAL SAFETY DATA SHEET



Date Issued : 02/02/2009
 MSDS No : F-15 PART B
 Date-Revised : 02/24/2012
 Revision No : 1

F-15 PART B

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: F-15 PART B
GENERAL USE: Polyurethane curative
CHEMICAL FAMILY: Modified polyether polyol mixture

MANUFACTURER

BJB Enterprises, Inc.
 14791 Franklin Avenue
 Tustin, CA 92780

Customer Service Number: (714) 734-8450

Fax: (714) 734-8929

24 HR. EMERGENCY TELEPHONE NUMBERS

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

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

PHYSICAL APPEARANCE AND ODOR: Amber liquid with a slight amine 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.

INGESTION: May be harmful if swallowed.

INHALATION: May result in respiratory irritation.

MEDICAL CONDITIONS AGGRAVATED: None Known

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

3. COMPOSITION / INFORMATION ON INGREDIENTS

| Chemical Name | Wt.% | CAS |
|--|---------|-------------|
| Diisodecyl Phthalate (DIDP) | 40 - 60 | 68515-49-1 |
| Butyl benzyl phthalate | 5 - 10 | 85-68-7 |
| Di-(methylthio)toluenediamine | 1 - 5 | 106264-79-3 |
| Phenyl mercuric neodecanoate (35% as Hg) | 0.82 | 26545-49-3 |

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. Consult a physician.

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.

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INHALATION: Remove patient from exposure, keep warm and at rest. Obtain immediate medical attention. Treatment is symptomatic for primary irritation or bronchospasm. If breathing is labored, oxygen should be administered by qualified personnel. Apply artificial respiration if breathing has ceased or shows signs of failing.

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: 157°C (315°F) Pinsky-Martens CC

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

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

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide and carbon dioxide.

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 a 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

F-15 PART B**EXPOSURE GUIDELINES**

| OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200) | | | | | | | |
|---|------|-----------------|-------------------|-----------|-------------------|-------------|-------------------|
| | | EXPOSURE LIMITS | | | | | |
| | | OSHA PEL | | ACGIH TLV | | SupplierOEL | |
| Chemical Name | | ppm | mg/m ³ | ppm | mg/m ³ | ppm | mg/m ³ |
| Diisodecyl Phthalate (DIDP) | TWA | NE | NE | NE | NE | NE | 5 |
| | STEL | NE | NE | NE | NE | NE | NE |
| Butyl benzyl phthalate | TWA | NE | NE | NE | NE | NE | NE |
| | STEL | NE | NE | NE | NE | NE | NE |
| Di-(methylthio)toluenediamine | TWA | NE | NE | NE | NE | NE | NE |
| | STEL | NE | NE | NE | NE | NE | NE |
| Phenyl mercuric neodecanoate (35% as Hg) | TWA | NE | 0.1 | NE | 0.1 | NE | NE |
| | STEL | NE | NE | NE | NE | NE | NE |

ENGINEERING CONTROLS: Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

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: Chemical-resistant gloves and chemical goggles, face-shield, and synthetic apron or coveralls should be used to prevent contact with eyes, skin, or clothing. Wear nitrile or neoprene gloves. Chemical resistant gloves lined with polyethylene offer maximum protection.

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.

WORK HYGIENIC PRACTICES: Contaminated clothing should be changed and washed before reuse. Eating, drinking and smoking in immediate work area should be prohibited. Wash hands before eating.

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 amine

COLOR: Amber

pH: Not Established

PERCENT VOLATILE: 0.34

VAPOR PRESSURE: < 0.1 mmHg at 25°C (77°F)

VAPOR DENSITY: Not Established

BOILING POINT: Not Established

FLASHPOINT AND METHOD: 157°C (315°F) Pinsky-Martens CC

SOLUBILITY IN WATER: Slightly soluble

SPECIFIC GRAVITY: 1.000 (water=1) at 25°C (77°F)

VISCOSITY: 250 Centipoise at 25°C (77°F)

VOC (Volatile Organic Compound): 3.400 g/l Calculated. Theoretical VOC minus water and exempt solvents.

F-15 PART B**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.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide and carbon dioxide.

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

11. TOXICOLOGICAL INFORMATION**TOXICITY TO ANIMALS**

| Chemical Name | ORAL LD ₅₀ (rat) | DERMAL LD ₅₀ (rabbit) | INHALATION LC ₅₀ (rat) |
|--|--------------------------------|-------------------------------------|--------------------------------------|
| Diisodecyl Phthalate (DIDP) | > 10 g/kg | > 3.16 g/kg | > 0.13 mg/l |
| Butyl benzyl phthalate | 20400 mg/kg | > 10000 mg/kg | > 6.7 mg/l |
| Di-(methylthio)toluenediamine | 1515 mg/kg | > 2000 mg/kg | Not Established |
| Phenyl mercuric neodecanoate (35% as Hg) | 25 to 200 mg/kg | Not Established | Not Established |

CARCINOGENICITY

| Chemical Name | IARC Status |
|------------------------|----------------|
| Butyl benzyl phthalate | 3 |

12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION: Mercury has toxic effects on bacteria, daphnia magna, fish, and other aquatic organisms.

Mercury can accumulate in organisms, danger of bioaccumulation.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protections and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

14. TRANSPORT INFORMATION**DOT (DEPARTMENT OF TRANSPORTATION) LAND**

NOTE: Not Regulated

AIR (ICAO/IATA): Not Regulated

VESSEL (IMO/IMDG): Not Regulated

15. REGULATORY INFORMATION**UNITED STATES****SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)**

311/312 HAZARD CATEGORIES: None

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 40 CFR Part 372:

F-15 PART B**EPCRA SECTION 313 SUPPLIER NOTIFICATION**

| Chemical Name | Wt.% | CAS | Comments |
|--|------|------------|--|
| Phenyl mercuric neodecanoate (35% as Hg) | 0.82 | 26545-49-3 | Mercury Compounds (Category Code N458) |

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 |
|------------------------|--------|-----------|
| Butyl benzyl phthalate | 5 - 10 | 100 lbs. |

TSCA (TOXIC SUBSTANCE CONTROL ACT)

TSCA STATUS: This product or its components are included in the EPA TSCA Chemical Substance Inventory. Di-(methylthio)toluenediamine is listed under its components CAS no. 102093-68-5 & 104983-85-9.

OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA)

29 CFR1910.119---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 |
|--|---------|--------------------------------------|
| Diisodecyl Phthalate (DIDP) | 40 - 60 | ● Developmental Toxicity |
| Butyl benzyl phthalate | 5 - 10 | ● Cancer ● Developmental Toxicity |
| Phenyl mercuric neodecanoate (35% as Hg) | 0.82 | ● Developmental Toxicity |

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

CANADA**WHMIS HAZARD SYMBOL AND CLASSIFICATION**

Toxic
Class D-2A: Material causing other toxic effects (Very toxic).
Class D-2B: Material causing other toxic effects (Toxic).

WHMIS (WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM): This product has been classified according to the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

DOMESTIC SUBSTANCE LIST (INVENTORY): All components in this product are included on the Domestic Substances List (DSL) or the Non-Domestic Substances List (NDSL).

EUROPEAN COMMUNITY

F-15 PART B**EEC LABEL SYMBOL AND CLASSIFICATION**

"Xn" - Harmful

RISK PHRASES

R22: Harmful if swallowed.

R43: May cause sensitization by skin contact.

R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

SAFETY PHRASES

S2: Keep out of the reach of children.

S24/25: Avoid contact with skin and eyes.

S28: After contact with skin, wash immediately with plenty of water and soap.

S36/37/39: Wear suitable protective clothing, gloves and eye/face protection.

S45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

S60: This material and its container must be disposed of as hazardous waste.

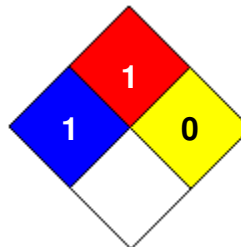
S61: Avoid release to the environment. Refer to special instructions/safety data sheets.

16. OTHER INFORMATION**REASON FOR ISSUE:** Revision**APPROVED BY:** Michael Rose **TITLE:** R & D Manager**PREPARED BY:** Gus Alidad

REVISION SUMMARY: This MSDS replaces the 02/02/2009 MSDS. Revised: **Section 1:** REASON FOR ISSUE. **Section 2:** EMERGENCY OVERVIEW - IMMEDIATE CONCERNS. **Section 3:** Wt.%. **Section 5:** EXPLOSION HAZARDS, HAZARDOUS DECOMPOSITION PRODUCTS. **Section 10:** POLYMERIZATION. **Section 13:** EMPTY CONTAINER. **Section 15:** CERCLA REGULATORY, TSCA STATUS, WHMIS (WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM).

HMIS RATING

| | | |
|----------------------------|-------------------------------------|----------|
| HEALTH | <input type="checkbox"/> | 1 |
| FLAMMABILITY | <input type="checkbox"/> | 1 |
| PHYSICAL HAZARD | <input type="checkbox"/> | 0 |
| PERSONAL PROTECTION | <input checked="" type="checkbox"/> | |

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

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