SAFETY DATA SHEET



Date Prepared: 10/28/2015

SDS No: F-164 FR REV 1 PART A

F-164 FR REV 1 PART A

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: F-164 FR REV 1 PART A

GENERAL USE: Polyurethane resin

MANUFACTURER

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

Emergency Phone: (714) 734-8450

24 HR. EMERGENCY TELEPHONE NUMBERS

CHEMTREC (USA & Canada): (800) 424-9300

or (703) 527-3887 CCN# 2820

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATIONS

Health:

Acute Toxicity (Oral), Category 4

Acute Toxicity (Inhalation), Category 4

Skin Irritation, Category 2

Eye Irritation, Category 2A

Respiratory Sensitization, Category 1

Skin Sensitization, Category 1

Carcinogenicity, Category 2

Target Organ Toxicity (Single exposure), Category 3

Target Organ Toxicity (Repeated exposure), Category 2

GHS LABEL





Health hazard

Exclamation mark

SIGNAL WORD: DANGER HAZARD STATEMENTS

H302: Harmful if swallowed.

H332: Harmful if inhaled.

H315: Causes skin irritation.

H319: Causes serious eye irritation.

H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H317: May cause an allergic skin reaction.

H351: Suspected of causing cancer (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).

H335: May cause respiratory irritation.

H373: May cause damage to organs (state all organs affected, if known) through prolonged or repeated exposure (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).

PRECAUTIONARY STATEMENTS

Prevention:

P201: Obtain special instructions before use.

P202: Do not handle until all safety precautions have been read and understood.

P260: Do not breathe dust/fume/gas/mist/vapours/spray.

P271: Use only outdoors or in a well-ventilated area.

P285: In case of inadequate ventilation wear respiratory protection.

P264: Wash ... thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.

P272: Contaminated work clothing should not be allowed out of the workplace.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

Response:

P301+P312: IF SWALLOWED: Call a POISON CENTER/doctor/physician if you feel unwell.

P330: Rinse mouth.

P304+P341: IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

P342+P311: If experiencing respiratory symptoms: Call a POISON CENTER/doctor/physician.

P302+P352: IF ON SKIN: Wash with plenty of soap and water.

P321: Specific treatment (see ... on this label).

P333+P313: If skin irritation or rash occurs: Get medical advice/attention.

P362: Take off contaminated clothing.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313: If eye irritation persists: Get medical advice/attention.

P308+P313: IF exposed or concerned: Get medical advice/ attention.

P314: Get medical advice/attention if you feel unwell.

Storage:

P403+P233: Store in a well-ventilated place. Keep container tightly closed.

P405: Store locked up.

Disposal:

P501: Dispose of contents/container in accordance with local/regional/national/international regulations.

EMERGENCY OVERVIEW

PHYSICAL APPEARANCE: Pale yellow liquid with a slight musty odor.

IMMEDIATE CONCERNS: Harmful by inhalation. Use in well ventilated areas. Irritating to eyes, skin, and respiratory system. May cause sensitization by inhalation and skin contact. This product is a respiratory irritant and potential respiratory sensitizer. Repeated inhalation of vapour or aerosol at levels above the occupational exposure limit could cause respiratory sensitization. A hyper-reactive response to even minimal concentrations of diisocyanates may develop in sensitized persons. The onset of the respiratory symptoms may be delayed for several hours after exposure.

Reacts slowly with water to produce carbon dioxide which may rupture closed containers. This reaction accelerates at higher temperatures. Do not breathe vapor or mist. Do not get on skin or clothing. Avoid contact with eyes. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling.

POTENTIAL HEALTH EFFECTS

EYES: Causes serious eye irritation.

SKIN: Causes skin irritation. May cause an allergic skin reaction.

INGESTION: Harmful if swallowed.

INHALATION: Harmful if inhaled. Inhalation at levels above the occupational exposure limit could cause respiratory sensitization and risk of serious damage to the respiratory system.

MEDICAL CONDITIONS AGGRAVATED: Pre-existing eye, skin, and respiratory conditions may be aggravated by exposure.

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

TARGET ORGAN STATEMENT: Contains material which causes damage to the following organs: upper respiratory tract.

SENSITIZATION: May cause allergic skin and respiratory reaction.

3. COMPOSITION / INFORMATION ON INGREDIENTS



| Chemical Name | Wt.% | CAS |
|---|---------|------------|
| poly[oxy(methyl-1,2-ethanediyl)], .alphahydroomegahydroxy-, polymer with 1,1'-methylenebis[4-isocyanatobenzene] | 15 - 40 | 9048-57-1 |
| 4,4'-Diphenylmethane diisocyanate | 10 - 30 | 101-68-8 |
| 2-propanol, 1-chloro-, Phosphate (3:1) | 10 - 30 | 13674-84-5 |
| Benzene, 1,1'-methylenebis[4-isocyanato-, homopolymer | 5 - 10 | 25686-28-6 |

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. Get immediate medical attention.

SKIN: Immediately wash skin with soap and plenty of water. Remove contaminated clothing. Get medical attention if irritation or rash develops. Wash clothing before reuse.

INGESTION: If swallowed, call a physician immediately. Do not induce vomiting unless directed to do so by medical personnel. Provided the patient is conscious, wash out mouth with water. Never give anything by mouth to an unconscious person.

INHALATION: Remove to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Get immediate medical attention.

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

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

HAZARDOUS COMBUSTION PRODUCTS: Carbon monoxide, carbon dioxide, nitrogen oxides, hydrocarbons, hydrogen cyanide, and oxides of phosphorus.

EXPLOSION HAZARDS: Material will react with water which produces carbon dioxide gas, a hazardous build-up of pressure could result if contaminated containers are re-sealed. Containers may rupture if overheated.

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.

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).

ENVIRONMENTAL PRECAUTIONS

WATER SPILL: Do not discharge into drains or rivers.

GENERAL PROCEDURES: Refer to section 8 of SDS for personal protection details.

RELEASE NOTES: Composition and extent of any spill should be evaluated against local regulations and reported to the proper agencies, if necessary.

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 dry and well-ventilated 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.

STORAGE TEMPERATURE: 65-80°F (18-27°C)

SHELF LIFE: 6 months from date of shipment under manufacturers recommended storage conditions.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDELINES

| OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200) | | | | | | | | | |
|---|------|------------------------|-------------------|-------|------------------------|-----------|-------------------|--|--|
| | | EXPOSURE LIMITS | | | | | | | |
| | | OSHA PEL ACGIH TLV Sup | | | ACGIH TLV Supplier OEL | | | | |
| Chemical Name | | ppm | mg/m ³ | ppm | mg/m ³ | ppm | mg/m ³ | | |
| poly[oxy(methyl-1,2-ethanediyl)], .alphahydroomegahydroxy-, polymer with 1,1'-methylenebis[4-isocyanatobenzene] | TWA | NE | NE | NE | NE | NE | NE | | |
| | STEL | NE | NE | NE | NE | NE | NE | | |
| 4,4'-Diphenylmethane diisocyanate | TWA | 0.02 | 0.2 | 0.005 | 0.05 | 0.005 [1] | 0.05 [1] | | |
| | STEL | NE | NE | NE | NE | NE | NE | | |
| 2 | TWA | NE | NE | NE | NE | NE | NE | | |
| 2-propanol, 1-chloro-, Phosphate (3:1) | STEL | NE | NE | NE | NE | NE | NE | | |
| Benzene, 1,1'-methylenebis[4-isocyanato-, homopolymer | TWA | NE | NE | NE | NE | NE | NE | | |
| | STEL | NE | NE | NE | NE | NE | NE | | |
| Footnotes: | | | | | | | | | |

1. NIOSH REL

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: Slightly musty **COLOR:** Pale yellow

techsil.co. pH: Not Applicable

PERCENT VOLATILE: 0.05

FLASH POINT AND METHOD: > 160°C (320°F) Pensky-Martens CC

AUTOIGNITION TEMPERATURE: > 500°C (932°F)

VAPOR PRESSURE: Not Established VAPOR DENSITY: Not Established BOILING POINT: > 220°C (428°F)

SOLUBILITY IN WATER: Reacts with water

SPECIFIC GRAVITY: 1.175 (water=1) at 25°C (77°F)

VISCOSITY #1: 800 Centipoise at 25°C (77°F)

(VOC): < 0.590 g/l Calculated. Theoretical VOC minus water and exempt solvents.

10. STABILITY AND REACTIVITY

REACTIVITY: Hazardous reactions will not occur under normal transport or storage conditions.

STABILITY: This product is stable under normal ambient conditions of temperature and pressure.

CONDITIONS TO AVOID: High temperatures, moisture, and freezing conditions.

POSSIBILITY OF HAZARDOUS REACTIONS: Reaction with water (moisture) produces CO2-gas. Exothermic reaction with materials containing active hydrogen groups. The reaction becomes progressively more vigorous and can be violent at higher temperatures if the miscibility of the reaction partners is good or is supported by stirring or by the presence of solvents. MDI is insoluble with, and heavier than water and sinks to the bottom but reacts slowly at the interface. A solid water-insoluble layer of polyurea is formed at the interface by liberating carbon dioxide gas.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, carbon dioxide, nitrogen oxides, hydrocarbons, hydrogen cyanide, and oxides of phosphorus.

INCOMPATIBLE MATERIALS: Water, alcohols, amines, bases, acids, and strong oxidizers.

11. TOXICOLOGICAL INFORMATION

ACUTE

| Chemical Name | ORAL LD ₅₀ | DERMAL LD ₅₀ | INHALATION LC ₅₀ |
|---|-----------------------|-------------------------|--------------------------------|
| poly[oxy(methyl-1,2-ethanediyl)], .alphahydroomegahydroxy-, polymer with 1,1'-methylenebis[4-isocyanatobenzene] | Not Established | Not Established | Not Established |
| 4,4'-Diphenylmethane diisocyanate | > 10000 mg/kg | > 9400 mg/kg | 0.49 mg/l (4 h) |
| 2-propanol, 1-chloro-, Phosphate (3:1) | 1500 mg/kg | 1230 mg/kg | 5 mg/l (4 h) |
| Benzene, 1,1'-methylenebis[4-isocyanato-, homopolymer | Not Established | Not Established | Not Established |

CHRONIC: Contains material that can cause target organ damage. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

CARCINOGENICITY

| Chemical Name | IARC Status |
|-----------------------------------|----------------|
| 4,4'-Diphenylmethane diisocyanate | 3 |

IARC: This product contains substances that are not classifiable as carcinogens to humans.

IRRITATION: Causes eye and skin irritation.

SENSITIZATION: May cause sensitization by inhalation and skin contact.

TARGET ORGANS: Contains material which causes damage to the following organs: upper respiratory tract.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: No data available

ECOTOXICOLOGICAL INFORMATION: No specific ecological data are available for this product. Refer to Section 6 for information regarding accidental release and Section 15 for regulatory reporting information.

BIOACCUMULATION/ACCUMULATION: No data available

DISTRIBUTION: No data available

CHEMICAL FATE INFORMATION: No data available

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): Not Regulated

AIR (ICAO/IATA): Not Regulated VESSEL (IMO/IMDG): Not Regulated

COMMENTS: Not dangerous according to transport regulations.

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

311/312 HAZARD CATEGORIES: Acute health hazard. Chronic health hazard

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:

EPCRA SECTION 313 SUPPLIER NOTIFICATION

| Chemical Name | Wt.% | CAS | Comments |
|-----------------------------------|---------|----------|---|
| 4,4'-Diphenylmethane diisocyanate | 10 - 30 | 101-68-8 | Diisocyanate Compounds (Category Code N120) |

CERCLA (COMPREHENSIVE ENVIRONMENTAL 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 |
|-----------------------------------|---------|--------------|
| 4,4'-Diphenylmethane diisocyanate | 10 - 30 | 5,000 lbs. |

TSCA (TOXIC SUBSTANCE CONTROL ACT)

TSCA REGULATORY: This product contains chemical(s) subject to TSCA Section 12(b) export notification: None

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

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.

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):

Section 25249.5):
None

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

WHMIS HAZARD SYMBOL AND CLASSIFICATION







Toxic

Toxic

WHMIS CLASSIFICATION

Class D1A: Poisonous and infectious material (Very toxic). Class D2A: Poisonous and infectious material (Very toxic). Class D2B: Poisonous and infectious material (Toxic).

WHMIS HEALTH EFFECTS CRITERIA

D1A - Acute lethality

D2A - Respiratory tract sensitization

D2B - Skin irritation

D2B - Skin Sensitization

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.

WHMIS CLASS: The D1A classification applies for this material in aerosol or mist form.

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

GENERAL COMMENTS: No data available

16. OTHER INFORMATION

REASON FOR ISSUE: New Issue

Date Prepared: 10/28/2015

HMIS RATING





HMIS RATINGS NOTES: Personal Protection: See Section 8

MANUFACTURER DISCLAIMER: This information is furnished without warranty, expressed or implied, except that 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 this data.

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SAFETY DATA SHEET



Date Prepared: 10/28/2015

SDS No: F-164 FR REV 1 PART B

F-164 FR REV 1 PART B

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: F-164 FR REV 1 PART B **GENERAL USE:** Polyurethane curative

MANUFACTURER

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

Emergency Phone: (714) 734-8450

24 HR. EMERGENCY TELEPHONE NUMBERS

CHEMTREC (USA & Canada): (800) 424-9300

or (703) 527-3887 CCN# 2820

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATIONS

Health:

Skin Sensitization, Category 1

Environmental:

Chronic Hazards to the Aquatic Environment, Category 2

GHS LABEL





Exclamation mark

Environment

SIGNAL WORD: WARNING HAZARD STATEMENTS

H317: May cause an allergic skin reaction.

H411: Toxic to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENTS

Prevention:

P261: Avoid breathing dust/fume/gas/mist/vapours/spray.

P272: Contaminated work clothing should not be allowed out of the workplace.

P280: Wear protective gloves.

P273: Avoid release to the environment.

Response:

P302+P352: IF ON SKIN: Wash with plenty of soap and water.

P333+P313: If skin irritation or rash occurs: Get medical advice/attention.

P321: Specific treatment (see ... on this label).

P363: Wash contaminated clothing before reuse.

P391: Collect spillage.

Disposal:

P501: Dispose of contents/container in accordance with local/regional/national/international regulations.

EMERGENCY OVERVIEW

PHYSICAL APPEARANCE: Amber liquid with a slight amine odor.

IMMEDIATE CONCERNS: Avoid eye and skin contact. Avoid breathing vapors. May cause eye and skin irritation. May cause sensitization by skin contact. Use in well ventilated areas.

POTENTIAL HEALTH EFFECTS

EYES: May cause eye irritation.

SKIN: May cause skin irritation. May cause an allergic skin reaction.

INGESTION: May be harmful if swallowed. **INHALATION:** May cause respiratory irritation.

MEDICAL CONDITIONS AGGRAVATED: Pre-existing skin conditions may be aggravated by exposure.

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

SENSITIZATION: May cause allergic skin reaction.

3. COMPOSITION / INFORMATION ON INGREDIENTS

| Chemical Name | Wt.% | CAS |
|-------------------------------|----------|-------------|
| Polyether polyol mixture | 60 - 100 | Proprietary |
| Di-(methylthio)toluenediamine | 5 - 10 | 106264-79-3 |

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. Get medical attention if irritation develops.

SKIN: Immediately wash skin with soap and plenty of water. Remove contaminated clothing. Get medical attention if irritation or rash develops. Wash clothing before reuse.

INGESTION: If swallowed, call a physician immediately. Do not induce vomiting unless directed to do so by medical personnel. Provided the patient is conscious, wash out mouth with water. Never give anything by mouth to an unconscious person.

INHALATION: Remove to fresh air. Seek medical attention if breathing becomes difficult or if respiratory irritation develops.

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

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

HAZARDOUS COMBUSTION PRODUCTS: Carbon monoxide, carbon dioxide, nitrogen oxides, and oxides of sulfur.

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.

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).

ENVIRONMENTAL PRECAUTIONS

WATER SPILL: Do not discharge into drains or rivers.

GENERAL PROCEDURES: Refer to section 8 of SDS for personal protection details.

RELEASE NOTES: Composition and extent of any spill should be evaluated against local regulations and reported to the proper agencies, if necessary.

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 dry and well-ventilated 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.

STORAGE TEMPERATURE: 65-80°F (18-27°C)

SHELF LIFE: 6 months from date of shipment under manufacturers recommended storage conditions.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDELINES

| OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200) | | | | | | | | |
|---|-----------------|-----|-------------------|--------|-------------------|-----|-------------------|--|
| | EXPOSURE LIMITS | | | | | | | |
| OSHA PEL ACGIH TLV Supplier | | | | er OEL | | | | |
| Chemical Name | | ppm | mg/m ³ | ppm | mg/m ³ | ppm | mg/m ³ | |
| Polyether polyol mixture | 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 | |

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

PERSONAL PROTECTIVE EOUIPMENT

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

techsil.co pH: Not Established

PERCENT VOLATILE: 0.14

FLASH POINT AND METHOD: > 182.2°C (360°F) Pensky-Martens CC

VAPOR PRESSURE: Not Established VAPOR DENSITY: Not Established BOILING POINT: Not Established

SOLUBILITY IN WATER: Slightly soluble

SPECIFIC GRAVITY: 1.035 (water=1) at 25°C (77°F)

VISCOSITY #1: 920 Centipoise at 25°C (77°F)

(VOC): < 1.450 g/l Calculated. Theoretical VOC minus water and exempt solvents.

10. STABILITY AND REACTIVITY

REACTIVITY: Hazardous reactions will not occur under normal transport or storage conditions.

HAZARDOUS POLYMERIZATION: Product will not undergo polymerization.

STABILITY: This product is stable under normal ambient conditions of temperature and pressure.

CONDITIONS TO AVOID: High temperatures, moisture, and freezing conditions.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, carbon dioxide, nitrogen oxides, and oxides of sulfur.

INCOMPATIBLE MATERIALS: Isocyanates, strong acids, and strong oxidizers.

11. TOXICOLOGICAL INFORMATION

ACUTE

| Chemical Name | ORAL LD ₅₀ | DERMAL LD ₅₀ | INHALATION LC ₅₀ |
|-------------------------------|-----------------------|-------------------------|--------------------------------|
| Polyether polyol mixture | Not Established | Not Established | Not Established |
| Di-(methylthio)toluenediamine | 1515 mg/kg | > 2000 mg/kg | Not Established |

SENSITIZATION: May cause sensitization by skin contact.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: This product may cause risk of hazardous effects to the environment.

ECOTOXICOLOGICAL INFORMATION: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Avoid release to the environment.

BIOACCUMULATION/ACCUMULATION: No data available

DISTRIBUTION: No data available

CHEMICAL FATE INFORMATION: No data available

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): Not Regulated

AIR (ICAO/IATA): Not Regulated

VESSEL (IMO/IMDG): Not Regulated



COMMENTS: Not dangerous according to transport regulations.

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

311/312 HAZARD CATEGORIES: Acute health hazard. Chronic health hazard

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: None

CERCLA (COMPREHENSIVE ENVIRONMENTAL 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): None

TSCA (TOXIC SUBSTANCE CONTROL ACT)

TSCA REGULATORY: This product contains chemical(s) subject to TSCA Section 12(b) export notification: None

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

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.

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):

None

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

CANADA

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.

WHMIS CLASS: Does not meet criteria.

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

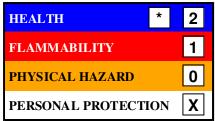
GENERAL COMMENTS: No data available

16. OTHER INFORMATION

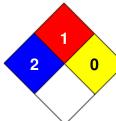
REASON FOR ISSUE: New Issue

Date Prepared: 10/28/2015

HMIS RATING



NFPA CODES



HMIS RATINGS NOTES: Personal Protection: See Section 8

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