



Safety Data Sheet

RF 1350 (Mod 4) Part A

Section 1. Identification

| | | | |
|------------------------------|--|----------------------------|----------------|
| Product Identifier | RF 1350 (Mod 4) Part A | | |
| Synonyms | N/A | | |
| Manufacturer Stock Numbers | | | |
| Recommended use | Component of Polyurethane. | | |
| Uses advised against | Reacts slowly with water to produce carbon dioxide that may rupture closed containers. This reaction accelerates at higher temperatures. | | |
| Manufacturer Contact Address | Resin Formulators 18027 Bishop Avenue Carson, CA, 90746 USA | | |
| | Phone | Emergency Phone | Fax |
| | (310) 204-6159 | (800) 424-9300 CHEMTREC | (310) 202-7247 |
| | Email | Website | |
| | sales@evroberts.com | http://www.evroberts.com | |

Section 2. Hazards Identification

| | |
|----------------|---|
| Classification | ACUTE TOXICITY - INHALATION - Category 5 EYE DAMAGE/IRRITATION - Category 2B SENSITIZATION - RESPIRATORY - Category 1B SENSITIZATION - SKIN - Category 1A SKIN CORROSION/IRRITATION - Category 2 SPECIFIC TARGET ORGAN TOXICITY (Repeated Exposure) - Category 2 SPECIFIC TARGET ORGAN TOXICITY (Single Exposure) - Category 2 SPECIFIC TARGET ORGAN TOXICITY (Single Exposure) - Category 3 |
| Signal Word | Warning |

Pictogram



Hazard Statements

Causes eye irritation
Irritating to respiratory system
Irritating to skin
May be harmful if inhaled
May cause an allergic skin reaction
May cause lung damage
May cause respiratory sensitization through repeated inhalation of aerosols
May cause sensitization by inhalation and skin contact

Precautionary Statements

Response

Get medical advice/attention if you feel unwell.
If experiencing respiratory symptoms: Call a poison center or doctor immediately
If exposed or concerned: Call a poison center or doctor and get immediate attention
If eye irritation persists: Get medical advice/attention.
IF INHALED: Call a POISON CENTER or doctor IMMEDIATELY due to the toxicity of the fumes in this product
If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.
If inhaled: Remove person to fresh air and keep comfortable for breathing.
If on skin: Wash with plenty of soap and water and obtain medical attention if irritation, redness or a burning sensation occurs
If skin irritation or rash occurs: Get medical advice/attention.
Specific treatment (read all directions on this Safety Data Sheet before handling this material)
Wash contaminated clothing before reuse.

Prevention

Avoid breathing dust/fume/gas/mist/ vapors/spray.
Contaminated work clothing must not be allowed out of the workplace.
Do not breathe dust/fume/gas/mist/ vapors/spray.
Do not eat, drink or smoke when using this product.
In case of inadequate ventilation wear respiratory protection.
Use only outdoors or in a well-ventilated area.
Wear protective gloves.

Storage

Store in a well-ventilated place. Keep container tightly closed.
Store locked up.

Disposal

Dispose of contents/container should only be done by trained personnel with this material. Wear full protection and evacuate the area. Prevent any further spillage into drains. Contain and absorb large spillages onto an inert, non-flammable absorbent carrier (such as earth or sand). Shovel into open-top drums or plastic bags for further decontamination, if necessary. Wash the spillage area clean with liquid decontaminant. Remove and dispose of all residues. Notify government authorities if release is reportable.

Ingredients of unknown toxicity

0%

Hazards not Otherwise
Classified

No Data Available

Section 3. Ingredients

| CAS | Ingredient Name | Weight % |
|------------|---|----------|
| | Prepolymer reaction products with MDI | 60-80 % |
| 26447-40-5 | Benzene, 1,1'-methylenebis[isocyanato- | 20-30 % |
| 101-68-8 | Benzene, 1,1'-methylenebis[4-isocyanato- | 15-25 % |
| 39310-05-9 | Benzene, 1,1'-methylenebis[isocyanato-, homopolymer | 1-10 % |

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First-Aid Measures

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| General | In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). |
| Inhalation | Remove patient from exposure, keep warm and at rest Obtain medical attention. Treatment is symptomatic for primary irritation or bronchospasm If breathing is labored, qualified personnel should administer oxygen. Apply artificial respiration if breathing has ceased or shows signs of failing. |
| Skin | Remove contaminated clothing. Wash affected areas thoroughly with soap and water. If irritation, redness, or a burning sensation develops and persists, obtain medical advice. Contaminated clothing should be thoroughly cleaned before reuse. Contaminated leather articles can not be decontaminated and should be destroyed. |
| Eye | Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. |
| Ingestion | Do not induce vomiting. Give milk or water. Get immediate medical attention. Careful evacuation of stomach by medical personnel imperative. |
| Notes To Physician | Symptomatic and supportive therapy may be needed following severe exposure. In such cases, medical follow-up should be maintained for at least 48 hours. |

Section 5. Fire Fighting Measures

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| Suitable Extinguishing Media | Extinguishing media: Carbon dioxide, dry chemical or appropriate foam. If water is used, very large quantities are required. Reaction between water and hot isocyanate may be vigorous. Contain runoff water with temporary barriers. |
| Unsuitable Extinguishing Media | This product will react with any materials containing active hydrogens such as water, alcohol, amines, bases and acids. The reaction with water is very slow under 50°C (122°F) but is accelerated at higher temperatures. Do not use water due to high water reaction with the chemical. |
| Fire and Explosion Hazards | Fire and Explosion Hazards: Containers may burst under intense heat due to reaction with water, a hazardous build-up of pressure could result if contaminated containers are |

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|----------------------------------|---|
| | re-sealed. |
| Protective Equipment | Protective Equipment: Use self-contained breathing apparatus and full protective clothing (Bunker Gear). |
| Flash Point | Flash Point: >400°F (204°C) (COC) |
| Flammable Limits (Lower) | Flammable Limits (Lower): Not Available |
| Flammable Limits (Upper) | Flammable Limits (Upper): Not Available |
| Auto Ignition Temperature | Auto Ignition Temperature: 464°F (240°C), (4,4' - Diphenylmethane Diisocyanage) |
| Decomposition Temperature | 646°F (341.1°C), (4,4' - Diphenylmethane Diisocyanage) |
| Rate of Burning | Rate of Burning: Not Available |
| Explosive Power | Explosive Power: None |
| Sensitivity to Mechanical Impact | Sensitivity to Mechanical Impact: None |
| Sensitivity to Static Discharge | Sensitivity to Static Discharge: None |
| Combustion Products | Combustion Products: CO, CO2, NOx and some HCN |

Section 6. Accidental Release Measures

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|---|---|
| Major Spills | For Major Spills, call CHEMTREC at 1-800-424-9300 |
| Spills, Leaks or Releases | Clean up should only be performed by trained personnel. People dealing with major spillages should wear full protective clothing including respiratory protection. Evacuate the area. Prevent further leakage, spillage or entry into drains. Contain and absorb large spillages onto an inert, non-flammable absorbent carrier (such as earth or sand), Shovel into open-top drums or plastic bags for further decontamination, if necessary. Wash the spillage area clean with liquid decontaminant. Remove and dispose of residues. Notify applicable government authorities if release is reportable. Small spills: Take up with an absorbent material and dispose of properly. |
| Preparation of Decontamination Solution | Prepare a decontamination solution of 0.2-0.5% liquid detergent and 3-8% concentrated ammonium hydroxide in water (5-10% sodium carbonate may be substituted for the ammonium hydroxide). Follow the precautions on the supplier's material safety data sheets when preparing and using solution. |
| Use of Decontamination Solution | Allow deactivated material to stand for at least 30 minutes before shoveling into drums. Do not tighten the bungs. Mixing with wet earth is also effective, but slower. |

Section 7. Handling and Storage

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| Handling | Avoid personal contact with the product or reaction mixture. Use only with adequate ventilation to ensure that the defined occupational exposure limit is not exceeded. The efficiency of the ventilation must be monitored regularly |
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because of the possibility of blockage. Avoid breathing aerosols, mists and vapors. When the product is sprayed or heated, an approved MSHA/NIOSH positive-pressure, supplied-air respirator may be required.

Storage Requirements

Keep containers properly sealed and when stored indoors, in a well ventilated area. Keep contents away from moisture. Due to reaction with water, producing CO2 gas, a hazardous build-up of pressure could result if contaminated containers are re-sealed. Do not store in containers made of copper, copper alloys or galvanized surfaces. If a container is contaminated, do not reseal it. Reseal containers only after placing under a nitrogen blanket.

Storage Temperature

Ideal storage temperature is 60-100 Degrees F (16-38 Degrees C)

Other Precautions

KEEP STOCKS OF DECONTAMINANT (SEE SECTION 6) READILY AVAILABLE.

Section 8. Exposure Controls/Personal Protection

Occupational Exposure Limits

| Ingredient Name | ACGIH TLV | OSHA PEL | STEL |
|---|----------------------------------|----------|------|
| Prepolymer reaction products with MDI | N/A | N/A | N/A |
| Benzene, 1,1'-methylenebis[isocyanato- | N/A | N/A | N/A |
| Benzene, 1,1'-methylenebis[4-isocyanato- | 0.005 PPM TWA/0.02 PPM (CEILING) | 0.02 PPM | N/A |
| Benzene, 1,1'-methylenebis[isocyanato-, homopolymer | N/A | N/A | N/A |

Personal Protective Equipment

Goggles, Gloves, Apron, Face Shield, Respirator, PROTECTIVE CLOTHING, VENTILATION, CHEMICAL GOGGLES

Preventive Measures

Conditions of use, adequacy of engineering or other control measures, and actual exposures will dictate the need for specific protective devices at your workplace.

Engineering Controls

Use local exhaust ventilation to maintain airborne concentrations below the TLV. Suitable respiratory equipment should be used in cases of insufficient ventilation or where operational procedures demand it. Follow guidelines in the ACGIH publication "Industrial Ventilation".

Eye Protection

Chemical safety goggles. If there is a potential for splashing, use a full-face shield.

Skin Protection

The following protective materials are recommended. Gloves - neoprene, nitrile-butadiene rubber, butyl rubber. Thin disposable gloves should be avoided for repeated or long term use. Protective clothing should be selected and used in accordance with "Guidelines for the Selection of Chemical Protective Clothing" published by ACGIH.

Respiratory Protection

Use a NIOSH/MSHA approved positive pressure air-supplied respirator equipped with a full facepiece, or an air-supplied hood, if airborne concentrations exceed or are expected to exceed the TLV. Air purifying (cartridge type) respirators are not approved for protection against Diisocyanate.

Exposure Guidelines

Medical supervision of all employees who handle or come in contact with respiratory sensitizers is recommended. Persons with asthmatic-type conditions, chronic bronchitis, other chronic respiratory diseases or recurrent skin eczema or sensitization should be excluded from working with this product. Once a person is diagnosed as sensitized, no further exposure to any sensitizer should be permitted.

Occupational Exposure Limits

HAZARDOUS INGREDIENTS:
4,4'-Diphenylmethane Diisocyanate:
ACGIH TLV: 0.005 ppm (8-hour, 40 hours/week)
OSHA PEL CEILING: 0.02 ppm
NIOSH TLV: 0.005 (10-hour, 40 hours/week)
NIOSH STEL: 0.02 ppm (15-minute)

NOTE: The Occupational Exposure Limits listed for isocyanates do not apply to previously sensitized individuals.

Section 9. Physical and Chemical Properties

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|---------------------------------------|--|
| Physical State | Liquid |
| Color | Clear |
| Odor | Slightly Musty |
| Odor Threshold | N/A |
| Solubility | Reacts with water |
| Partition coefficient Water/n-octanol | N/A |
| VOC% | N/A |
| Viscosity | N/A |
| Specific Gravity | 1.15 |
| Density lbs/Gal | N/A |
| Pounds per Cubic Foot | N/A |
| Flash Point | 400°F (204°C) |
| FP Method | COC |
| pH | N/A |
| Melting Point | N/A |
| Boiling Point | N/A |
| Boiling Range | N/A |
| LEL | N/A |
| UEL | N/A |
| Evaporation Rate | N/A |
| Flammability | 1 |
| Decomposition Temperature | 646°F (341.1°C) |
| Auto-ignition Temperature | 464°F (240°C) (4,4' - Diphenylmethane) |
| Vapor Pressure | <0.0001 |
| Vapor Density | 8.5 |

Section 10. Stability and Reactivity

Hazardous Decomposition Products Highly unlikely under normal industrial use. See section 5.

Chemical Stability Stable at room temperature

Conditions to Avoid Avoid high temperatures. Avoid freezing

Incompatibilities This product will react with any materials containing active hydrogens such as water, alcohol, amines, bases and acids. The reaction with water is very slow under 50 degrees C (122 degrees F) but is accelerated at higher temperatures.

Hazardous Polymerization Polymerization may occur at elevated temperatures in the presence of alkalis, tertiary amines and metal compounds.

Section 11. Toxicological Information

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| Toxicological Test Data | Toxicological Data: Polymeric MDI: Oral LD50 (rat) >5,000 mg/kg Dermal LD50 (rabbit) > 5,000 mg/kg Inhalation LC50 (rat) = 490 mg/m ³ /4H (respirable aerosol) |
| Inhalation | This product is a respiratory irritant and potential respiratory sensitizer. Repeated inhalation of vapor or aerosol at levels above the occupational exposure limit could cause respiratory sensitization. Symptoms may include irritation to the eyes, nose, throat and lungs, possibly combined with dryness of the throat, tightness of chest and difficulty in breathing. The onset of the respiratory symptoms may be delayed for several hours after exposure. A hyper-reactive response to even minimal concentrations of MDI may develop in sensitized persons. |
| Skin Contact | Moderate irritant. Repeated and/or prolonged contact may cause skin sensitization. Animal studies have shown that respiratory sensitization can be induced by skin contact with known respiratory sensitizers including Diisocyanate. These results emphasize the need for protective clothing including gloves to be worn at all times when handling these chemicals or maintenance work. |
| Eye Contact | The aerosol, vapor or liquid will irritate human eyes following contact. |
| Ingestion | Ingestion may cause irritation of the gastrointestinal tract. Based on the oral LD50, this product is considered practically non-toxic by ingestion. |
| Chronic Effects | Ingestion may cause irritation of the gastrointestinal tract. Based on the oral LD50, this A study where groups of rats were exposed for 6 hours/day, 5 days/week for a lifetime to atmospheres of respirable polymeric MDI aerosol. Overall, the tumor incidence, both benign and malignant, and the number of animals with tumors were not different from controls. Only at the top level (6mg/m ³), there was a significant incidence of a benign tumor of the lung (adenoma) and one malignant tumor (adenocarcinoma). There were no lung tumors at 1 mg/m ³ and no effects at 0.2 mg/m ³ . The increased incidence of lung tumors is associated with prolonged respiratory irritation and the Concurrent accumulation of yellow material in the lung, which occurred throughout the study. In the absence of prolonged exposure to high concentrations leading to chronic irritation and lung damage, it is highly unlikely that tumor formation will occur. There are reports that chronic exposure may result in permanent decrease in lung function. |
| Carcinogenicity | The ingredients of this product are not classified as carcinogenic by ACGIH or IARC, not regulated as carcinogens by OSHA, and not listed as carcinogens by NTP |
| Mutagenicity | There is no substantial evidence of mutagenic potential. |
| Reproductive Effects | No adverse reproductive effects are anticipated. |
| Teratogenicity and Fetotoxicity | No information is available and no adverse teratogenic embryotoxic effects are anticipated. |

Section 12. Ecological Information

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| Environmental Fate and Distribution | It is unlikely that significant environmental exposure in the air or water will arise, based on consideration of the production and use of the substance. |
| Persistence and Degradability | Immiscible with water, but will react with water to produce inert and non-biodegradable solids. |
| Toxicological Test Data | Polymeric MDI LCo (zebra fish)>1000 mg/l LC60 (Daphnia magna) (24 hour) >1000 mg/l EC50 (E. Coli) > 100 mg/l |

Section 13. Disposal

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|-------------------|---|
| Disclaimer | The generation of waste should be avoided or minimized wherever possible. |
| Disclaimer Part 2 | Disposal should be in accordance with local, state, provincial and national regulations. This material is not a hazardous waste under RCRA 40 CFR 261. Small quantities should be treated with a liquid decontaminate. The treated waste is not a hazardous material under RCRA 40 CFR 261. Chemical waste, even small quantities, should never be poured down drains, sewers or waterways. |
| Disclaimer Part 3 | Empty containers should be decontaminated and either passed to an approved drum recycler or destroyed. |

Section 14. Transport Information

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|-------------------------|---------------|
| UN Number | N/A |
| UN Proper Shipping Name | N/A |
| DOT Classification | Not Regulated |
| Packing Group | N/A |

Section 15. Regulatory Information

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|------------------------|--|
| Additional Information | <p>United States Federal Regulations USA Classification OSHA Classification - Physical: Not Regulated - Health: Highly Toxic. Respiratory Sensitizer. Irritant - Target Organ: Respiratory Tract. Skin</p> <p>TSCA (Toxic Substances Control Act) Regulations: All ingredients are on the TSCA Chemical substance inventory.</p> <p>EPCRA Section 313 (40 CFR 372): This product contains the following chemical(s) subject to reporting requirements: - 74% 4,4'-MDI (CAS 101-68-8).</p> <p>CERCLA (Comprehensive Environmental Response, Compensation and Liability Act): 4,4'-Methylene diphenyl. Diisocyanate (CAS 101-68-8) has a 5,000 lb RQ (reportable quantity). Any spill or release above the RQ must be reported to the National Response Center (800) 424-8802. The % of 4,4' MDI in this product is listed in Section 2 of this MSDS.</p> <p>This product does not contain nor is it manufactured with ozone depleting substances.</p> <p>Massachusetts Right-to-Know, Pennsylvania Right-to-Know, New Jersey Rightto-Know, CERCLA</p> |
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Section 16. Other Information

Revision Date

4/17/2018

HMIS Rating (Not
Regulated)

The HMIS Rating for this product is:
Health: 3 Flammability: 1 Reactivity: 0

0=Minimal; 1=Slight; 2=Moderate; 3=Serious; 4=Severe

For Information Purposes Only - No Longer Regulated

Disclaimer

The information contained herein is believed to be accurate. It is provided independently of any sale of the product for purpose of hazard communication as part of E.V. Roberts' product safety program. It is not intended to constitute performance information concerning the product. No warranty, expressed or implied, or merchantability or fitness for a particular purpose is made with respect to the product or the information contained herein.

To determine applicability or effects of any law or regulation with respect to the product, user should consult his legal advisor or the appropriate government agency. E.V. Roberts does not undertake to furnish advice on such matters.



Safety Data Sheet

RF 1350 (Mod 4) Part B

Section 1. Identification

Product Identifier RF 1350 (Mod 4) Part B
Synonyms N/A
Manufacturer Stock
Numbers N/A

Recommended use Polyol blend for quick curing as a urethane adhesive/potting system
Uses advised against N/A

Manufacturer Contact

Address Resin Formulators
 18027 Bishop Avenue
 Carson, CA, 90746
 USA

| | | |
|----------------|----------------------------|----------------|
| Phone | Emergency Phone | Fax |
| (310) 204-6159 | (800) 424-9300 CHEMTREC | (310) 202-7247 |

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|---------------------|--------------------------|
| Email | Website |
| sales@evroberts.com | http://www.evroberts.com |

Section 2. Hazards Identification

Classification ACUTE TOXICITY - INHALATION - Category 3
 ACUTE TOXICITY - ORAL - Category 4
 ASPIRATION HAZARD - Category 2
 EYE DAMAGE/IRRITATION - Category 1
 SKIN CORROSION/IRRITATION - Category 1A
 SPECIFIC TARGET ORGAN TOXICITY (Repeated Exposure) - Category 1

Signal Word Warning

Pictogram



Hazard Statements

Causes damage to organs (can damage the mouth, throat, stomach, abdomen and chest pain). Also causes nausea, vomiting, diarrhea, thirst, weakness and/or collapse. Aspiration may occur during swallowing or vomiting, resulting in lung damage.

Causes serious eye damage

Causes severe skin burns and eye damage

Harmful if swallowed

May be harmful if swallowed and enters airways

Toxic if inhaled

Precautionary Statements

Response

Call a poison center or doctor if inhaled, if product gets in eyes or on skin or if product is ingested

Do NOT induce vomiting. Material is corrosive

Get medical advice/attention if you feel unwell.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If inhaled: Remove person to fresh air and keep comfortable for breathing.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

If swallowed: Immediately call a poison center or doctor.

If swallowed: Rinse mouth. Do NOT induce vomiting.

Immediately call a poison center or doctor if you feel faint or ill

Rinse mouth.

Specific treatment (read all instructions on this SDS before handling)

Wash contaminated clothing before reuse.

Prevention

Avoid breathing dust/fume/gas/mist/ vapors/spray.

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

Use only outdoors or in a well-ventilated area.

Wash all affected areas thoroughly after handling.

Wear eye protection/face protection.

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

Storage

Store in a well-ventilated place. Keep container tightly closed.

Store locked up.

Disposal

Dispose of contents/container in compliance with all Federal, State and local laws and regulations.

Ingredients of unknown toxicity

0%

Hazards not Otherwise Classified

Chronic Exposure

Repeated skin contact may cause a persistent irritation or dermatitis. Repeated inhalation may cause lung damage.

Medical Conditions

Skin contact may aggravate an existing dermatitis (skin condition).

Aggravated by Exposure

Overexposure to vapor, dust or mist may aggravate existing respiratory

conditions, such as asthma, bronchitis, and inflammatory or fibrotic respiratory disease.

Other Remarks

This product contains one or more amines which may produce temporary and reversible hazy or blurred vision. Symptoms disappear when exposure is terminated.

Section 3. Ingredients

| CAS | Ingredient Name | Weight % |
|-----|---|----------|
| | * Designates a specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret. | Unknown |
| | Polyether polyol | * % |
| | Polyetheramine | * % |

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First-Aid Measures

| | |
|---------------------|---|
| Eye | CORROSIVE to the eyes, may cause blindness. Immediately flush eyes with running water for a minimum of 15 minutes. Hold eyelids open during flushing. Obtain medical attention IMMEDIATELY. |
| Skin | CORROSIVE to the skin. May cause skin sensitization. Wash affected areas thoroughly with soap and water. Obtain medical attention IMMEDIATELY. Contaminated clothing should be thoroughly cleaned before reuse. Can not decontaminate leather articles. |
| Ingestion | CORROSIVE. DO NOT INDUCE VOMITING. Drink 1 or 2 glasses of water. If vomiting occurs, give more fluids. May cause severe and permanent damage to mouth, throat, and stomach. May be moderately toxic if swallowed. May cause CNS depression. Do not give anything by mouth to an unconscious person. Let physician make all decisions about how to handle symptoms. Obtain medical attention IMMEDIATELY. |
| Inhalation | CORROSIVE - Remove patient from exposure, keep warm and at rest. Vapors may be corrosive to upper respiratory tract. Repeated exposure can cause lung damage. Obtain medical attention IMMEDIATELY. Treatment is Symptomatic for primary irritation or bronchospasm. If breathing is labored, qualified personnel should administer oxygen. Apply artificial respiration if breathing has ceased or shows signs of failing. |
| Toxic Health Hazard | Swallowing of this corrosive material may result in severe ulceration, inflammation, and possible perforation of the upper alimentary tract, with hemorrhage and fluid loss. Aspiration of this product during induced emesis can result in severe lung injury. If evacuation of stomach is necessary, use method least likely to cause aspiration, such as gastric lavage after endotracheal intubation. Contact a Poison Control Center for additional treatment information. |

Section 5. Fire Fighting Measures

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|------------------------------|--|
| Suitable Extinguishing Media | Use alcohol-resistant foam, carbon dioxide, dry chemical or water spray when fighting fires involving this material. General purpose synthetic foams (including AFFF) or protein foams may function, but much less effectively. Direct water |
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|--------------------------------|---|
| | stream may spread fire. |
| Unsuitable Extinguishing Media | Do not use water because of violent reaction. |
| Protective Equipment | Use self-contained breathing apparatus and full protective clothing (Bunker Gear) due to toxic vapors and combustion products which can cause serious respiratory problems. Approach fire from upwind to avoid hazardous vapors and toxic decomposition products. Decontaminate or discard any clothing that may contain chemical residues. |
| Flash Point | Flash Point: >200°F (93°C) |

Section 6. Accidental Release Measures

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|--------------------------------------|--|
| Major Spills | For Major Spills, call CHEMTREC at 1-800-424-9300 |
| Procedures when material is released | Wear suitable protective clothing, gloves and eye/face protection. Use self-contained breathing apparatus and chemically protective clothing. Evacuate personnel to safe areas. Contain spill if possible. Wipe up or absorb on suitable material and shovel up. Prevent entry into sewers and waterways. Avoid contact with skin, eyes or clothing. |

Section 7. Handling and Storage

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|----------------------|---|
| Storage Temperatures | Minimum feasible storage temperature should be maintained. Eye wash and safety shower should be available nearby when this product is handled or used. |
| Storage Precautions | Keep container closed to protect from contamination. Period of exposure to high temperatures should be minimized. Water contamination should be avoided. If stored above 100 degrees F, a nitrogen atmosphere is recommended. |

Section 8. Exposure Controls/Personal Protection

| Occupational Exposure Limits | Ingredient Name | ACGIH TLV | OSHA PEL | STEL |
|-------------------------------|---|-----------|----------|------|
| | * Designates a specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret. | N/A | N/A | N/A |
| | Polyether polyol | N/A | N/A | N/A |
| | Polyetheramine | N/A | N/A | N/A |
| Personal Protective Equipment | Goggles, Gloves, Apron, Face Shield, Respirator, PROTECTIVE CLOTHING, RUBBER BOOTS, VENTILATION, CHEMICAL GOGGLES | | | |
| CHEMICAL_GOGGLES | Chemical Safety Goggles with Side Shields. Indirect Vented Goggles. | | | |
| FACE_SHIELD | Face Shield | | | |
| PROTECTIVE CLOTHING | Protective clothing should be selected and used in accordance with "Guidelines for the Selection of Chemical Protective Clothing" published by ACGIH. | | | |
| RUBBER_BOOTS | Please wear rubber boots at all times | | | |
| VENTILATION | Have proper ventilation | | | |

GLOVES

Neoprene, Nitrile-Butadiene rubber, butyl rubber. Thin disposable gloves should be avoided for repeated or long term use.

Section 9. Physical and Chemical Properties

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|---------------------------------------|-------------------|
| Physical State | Liquid |
| Color | Clear |
| Odor | Ammonia Like |
| Odor Threshold | N/A |
| Solubility | Reacts with water |
| Partition coefficient Water/n-octanol | N/A |
| VOC% | N/A |
| Viscosity | N/A |
| Specific Gravity | 1.04 |
| Density lbs/Gal | N/A |
| Pounds per Cubic Foot | N/A |
| Flash Point | >200°F (>93.33 C) |
| FP Method | N/A |
| pH | N/A |
| Melting Point | N/A |
| Boiling Point | N/A |
| Boiling Range | N/A |
| LEL | N/A |
| UEL | N/A |
| Evaporation Rate | N/A |
| Flammability | 1 |
| Decomposition Temperature | N/A |
| Auto-ignition Temperature | N/A |
| Vapor Pressure | N/A |
| Vapor Density | N/A |

Section 10. Stability and Reactivity

| | |
|-------------------------------|---|
| Incompatibilities | Acids |
| Hazardous Polymerization | Will not occur |
| Hazardous Combustion Products | Toxic levels of ammonia, combustion products of nitrogen, carbon monoxide, carbon dioxide, irritating aldehydes and ketones may be formed on burning in a limited air supply. |

Section 11. Toxicological Information

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|-------------------------|--|
| Toxicological Test Data | Toxicological Data: Polymeric MDI: Oral LD50 (rat) >500 g/kg Dermal LD50 (rabbit) > 2,000 mg/kg |
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Section 12. Ecological Information

Ecological Information No data

Section 13. Disposal

Disposal Do not dump into any sewers, on the ground or into any body of water. All disposal methods must be in compliance with all Federal, State and local laws and regulations. Regulations may vary in different locations. Water characterizations and compliance with applicable laws are the responsibility solely of the waste generator

Section 14. Transport Information

UN Number 2735
UN Proper Shipping Name Amines, liquid, corrosive, n,o,s,. (polyoxypropylene mixture)
DOT Classification 8
Packing Group III
Transportation Information Label Required: Corrosive

IMO: Not Evaluated

IATA/ICAO Class: Not Evaluated

Section 15. Regulatory Information

HMIS Rating (Not Regulated) The HMIS Rating for this product is:
Health: 3 Flammability: 1 Reactivity: 0

For Information Purposes Only - No Longer Regulated

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Section 16. Other Information

Revision Date 4/17/2018

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