



Safety Data Sheet

RF 1375 (Mod 2) Part A

Section 1. Identification

Product Identifier	RF 1375 (Mod 2) Part A		
Synonyms	Component of Polyurethane; 30703A		
Manufacturer Stock Numbers	30703A		
Recommended use	Component of Polyurethane.		
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
	Email	Website	
	sales@evroberts.com	http://www.evroberts.com	

Section 2. Hazards Identification

Classification	ACUTE TOXICITY - ORAL - Category 5 EYE DAMAGE/IRRITATION - Category 2B SENSITIZATION - RESPIRATORY - Category 1A SKIN CORROSION/IRRITATION - Category 2 SPECIFIC TARGET ORGAN TOXICITY (Single E - Category 3)
Signal Word	Danger
Pictogram	The pictogram section contains two red diamond-shaped hazard symbols. The first symbol shows a black silhouette of a person with a white starburst on their chest, indicating a health hazard. The second symbol is a large black exclamation mark, indicating a general hazard.

Hazard Statements	Causes eye irritation May be harmful if swallowed May cause allergy or asthma symptoms or breathing difficulties if inhaled May cause respiratory irritatio Moderately irritating to skin
Precautionary Statements	
Response	Call a poison center or doctor if you feel unwell. If experiencing respiratory symptoms: Call a poison center or doctor immediately If eye irritation persists: Get medical advice/attention. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. 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.
Prevention	Avoid breathing dust/fume/gas/mist/ vapors/spray. In case of inadequate ventilation wear respiratory protection. Use only outdoors or in a well-ventilated area. Wash affected areas thoroughly after handling.
Storage	Store in a well-ventilated place. Keep container tightly closed. Store locked up.
Disposal	Dispose of contents/container in accordance with federal, state and local agencies and use Decontamination Neutralizer to clean the area.
Ingredients of unknown toxicity	0%
Hazards not Otherwise Classified	
Acute Health Hazards	Inhalation: Dissocynate vapors or mist concentration above the TLV or PEL, can irritate the mucous membranes in the respiratory tract (nose, throat, lungs) causing runny nose, sore throat, coughing, chest discomfort, shortness of breath and reduced lung function (breathing obstruction). Persons with a preexisting, nonspecific bronchial hyperreactivity can respond to concentrations below the TLV or PEL with similar symptoms as well as asthma attack or asthma like symptoms. Effect may be delayed several hours. These effects are usually reversible. Skin: Causes irritation with symptoms of reddening, itching and swelling. Persons previously sensitized can experience allergic skin reaction with symptoms of reddening, itching, swelling and rash. Cured material is difficult to remove. Contact with MDI can cause discoloration Eyes: Causes irritation with symptoms of reddening, tearing, stinging and swelling. May cause temporary corneal injury. Vapor or aerosol may cause irritation with symptoms of burning and tearing. Ingestion: May cause irritation; Symptoms may include abdominal pain, nausea, vomiting and diarrhea.
Chronic Inhalation Effects of Overexposure	As a result of previous repeated overexposures or a single large dose, certain individuals will develop isocyanate sensitization (chemical asthma) which will cause them to react to a later exposure to isocyanates at levels well below the applicable exposure limits. These symptoms, which include chest tightness, wheezing, cough, shortness of breath or asthmatic attack, could be immediate or delayed up to several hours after exposure. Similar to many non-specific asthmatic responses, there are reports that once sensitized an individual can experience these symptoms upon exposure to dust, cold air or other irritants. This increased lung sensitivity can persist for weeks and in severe cases for several years. Chronic overexposure to isocyanates has also been reported to cause lung damage, including decrease in lung function, which may be permanent. Sensitization may be either temporary or permanent.
Skin	Prolonged contact with this product can cause reddening, swelling, rash, and

insome cases, skin sensitization. Animal tests on MDI indicate skin contact alone may lead to an allergic respiratory reaction.

Additional Hazards

Cutting or grinding of cured material may release nuisance dust and present a respiratory hazard. See special precautions (Section 8)

Section 3. Ingredients

CAS	Ingredient Name	Weight %
26447-40-5	Benzene, 1,1'-methylenebis[isocyanato-	0-10 %
65997-17-3	Glass, oxide, chemicals	1.5-2.5 %
	Prepolymer reaction products of MDI and pMDI	20-30 %
101-68-8	Benzene, 1,1'-methylenebis[4-isocyanato-	25-35 %
25686-28-6	Benzene, 1,1'-methylenebis[4-isocyanato-, homopolymer	5-15 %
9016-87-9	Isocyanic acid, polymethylenepolyphenylene ester	5-15 %
25068-38-6	Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane	5-25 %

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

Section 4. First-Aid Measures

Inhalation	Remove patient from exposure, keep warm and at rest. Obtain medical attention. Administer oxygen or artificial respiration as needed. Asthmatic symptoms may develop and may be immediate or delayed up to several hours. Extreme asthmatic reactions can be life threatening.
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	Immediately flush eyes with plenty of water for at least 15 minutes. Get immediate medical attention.
Ingestion	DO NOT INDUCE VOMITING! Rinse mouth with water. Get medical attention immediately. Contact Poison Control Center
Notes To Physician	Eyes: Stain for evidence of corneal injury. If cornea is burned, instill antibiotic/steroid preparation frequently. Work place vapors could produce reversible corneal epithelial edema impairing vision. Skin: This compound is a potent skin sensitizer. Treat symptomatically as for contact dermatitis or thermal burn. Ingestion: Treat symptomatically. There is no specific antidote. Inducing vomiting is contraindicated because of the irritation nature of the compound. symptomatic. Inhalation: Treatment is essentially symptomatic. An individual having a dermal or pulmonary sensitization reaction to this material should be removed from exposure to any isocyanate.

Section 5. Fire Fighting Measures

Suitable Extinguishing Media	Suitable Extinguishing Media: Use dry chemical, CO ₂ , water spray (fog) or foam.
Unsuitable Extinguishing Media	N/A
Protective Equipment	Protective Equipment: Avoid contact with the skin. A face shield should be worn. Use personal protective equipment. Wear a NIOSH-approved respirator as required to prevent over-exposure in accordance with 29 CFR 1910-134 for fire fighting if necessary.
Additional Hazardous Information	Besides breathing apparatus and NFPA compliant helmet, hood, boots and gloves. Avoid contact with product. Decontaminate equipment and protective clothing prior to reuse. During a fire, isocyanate vapors and other irritating, highly toxic gases may be generated by thermal decomposition or combustion. Exposure to heated diisocyanates can be extremely dangerous.
Fire and Explosion Hazards	Fire and Explosion Hazards: Containers may burst under intense heat or when contents are contaminated with water (CO ₂ is formed). Keep fire exposed containers cool with a cool water spray and reduce the risk of rupture. Apply water from a safe distance as the reaction between water and hot diisocyanate can be vigorous.

Section 6. Accidental Release Measures

Major Spills Spills, Leaks or Releases	For Major Spills, call CHEMTREC at 1-800-424-9300 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. Small spills: Neutralize small spills with decontaminant. Remove and dispose of residues. Notify applicable government authorities if release is reportable.
Neutralization/Decontamination	<ol style="list-style-type: none">1. Colormetric Laboratories Inc. (CLI) decontamination solution2. A mixture of 75% water, 20% non-ionic surfactant (e.g. Poly-tergent SL-62, Tergitol TMN-10) and 5% n-propanol.3. A mixture of 80% water, 20% non-ionic surfactant (e.g. Poly-tergent SL-62, Tergitol TMN-10)4. A mixture of 90% water, 3-8% ammonium hydroxide or concentrated ammonia, and 2% liquid detergent. <p>Use of Decontamination Solution: Apply and allow deactivation material to stand for at least 30 minutes before shoveling into drums. Do not tighten the bungs.</p>

Section 7. Handling and Storage

Storage Temperature Storage Requirements

Ideal storage temperature is 60-86°F (16-30°C)

If material is stored at temperatures above 86°F, it will generate pressure within the container from carbon dioxide gas. Prior to opening, carefully inspect the container. If the container is bulging, or there are any other indications of pressure within the container, do not open the container. Care should be taken whenever opening container in case of a pressure build up. Slow removal of bung closure or lid should safely remove pressure from a non-bulging drum. Observe safety precautions whenever opening a new container. Do not breathe vapors, mists or dusts. Use adequate ventilation to keep airborne isocyanate levels below the exposure limits. Wear respiratory protection if material is heated, sprayed, used in a confined space, or if the exposure limit is exceeded. Warning properties (irritation of the eyes, nose and throat or odor) are not adequate to prevent overexposure from inhalation. Wash thoroughly after handling. Do not breathe smoke and gases created by overheating or burning this material. Decomposition products can be highly toxic and irritation.

Product is susceptible to moisture contamination. Store in tightly closed containers to prevent moisture contamination. Do not reseal if contamination is suspected.

Other information: 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
	Benzene, 1,1'-methylenebis[isocyanato-	N/A	N/A	N/A
	Glass, oxide, chemicals	N/A	N/A	N/A
	Prepolymer reaction products of MDI and pMDI	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[4-isocyanato-, homopolymer	N/A	N/A	N/A
	Isocyanic acid, polymethylenepolyphenylene ester	N/A	N/A	N/A
	Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane	N/A	N/A	N/A
Personal Protective Equipment	Goggles, Gloves, Apron, Face Shield, Respirator, PROTECTIVE CLOTHING, RUBBER BOOTS, VENTILATION, CHEMICAL GOGGLES			
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". Monitoring for airborne diisocyanate should become part of the overall employee exposure characterization program. NIOSH, OSHA and others have developed sampling and analytical methods.			
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.			
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.			
Medical Surveillance	All applicants who are assigned to an isocyanate work area should undergo a pre-placement medical evaluation. A history of exzema or respiratory allergies such as a hay fever, are possible reasons for medical exclusion from isocyanate areas. Applicants who have a history of adult asthma should be restricted from work with isocyanates. Applicants with a history of prior isocyanate sensitization should be excluded from further work with isocyanates. A comprehensive annual medical surveillance program should be instituted for all empolyees who are potentially exposed to diisocyanates. Once a worker has been diagnosed a sensitized to any isocyanate, no further exposure can be permitted.			
Special Precautions for Grinding, Sanding or Cutting Cured Product	Machine operations performed on cured product may release nuisance dust. Respiratory protection meeting OSHA and ANSI standards must be worn if such operations are performed. Work environment should be properly cleaned after such operations to minimize lingering respiratory hazards.			
	Consult OSHA Hazard Communications Standard, 29 CFR Sections 1910.1200, 1915.1200, 1917.28, 1918.90, 1926.59 and 1928.21 and state and local worker or community "right to know" laws and regulations should be strictly			

followed. Your employees (and your customers in case of resale) should be made aware by posting and other means of the hazards and the required OSHA precautions. Provide Training for your employees about the OSHA precautions.

Section 9. Physical and Chemical Properties

Physical State	Liquid
Color	Amber - Brown
Odor	Weakly Aromatic
Odor Threshold	N/A
Solubility	No - Reacts slow with water
Partition coefficient Water/n-octanol	N/A
VOC%	N/A
Viscosity	N/A
Specific Gravity	N/A
Density lbs/Gal	N/A
Pounds per Cubic Foot	N/A
Flash Point	>200°C (392° F)
FP Method	Closed Cup
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	<0.0001 mmHg at 77° F (25°C)
Vapor Density	N/A

Section 10. Stability and Reactivity

Hazardous Reactions	Exposure to temperatures in excess of 158 degrees F (70 degrees C) may cause dangerous pressure build-up, resulting in the deformation and/or rupture of sealed containers. MDI reacts slowly with water to form CO2 gas. This gas can cause sealed containers to expand and possibly rupture. Contact with moisture, other materials that react with isocyanates, or temperatures above 350 degrees F (177 C), may cause polymerization.
Materials to Avoid	Water, Amines, Strong bases, Alcohols, Copper Alloys, Aluminum
Hazardous Decomposition Products	By first and high heat; hydrogen cyanide; carbon dioxide (CO2), oxides of nitrogen (NOx), dense black smoke, isocyanite, isocyanic acid, other undetermined compounds.

Section 11. Toxicological Information

Toxicology Information

This product has not been tested as a whole. Component information available sources is listed below.

Toxicity data Polymeric MDI
Oral LD50: >2,000 mg/kg (rat, Male/Female)
Dermal LD50: No Data
Inhalation LC50 (rat): 490 mg/m³ vapor, 4 h

Skin irritation: rabbit, slightly irritating

Repeated Dose Toxicity:
90 days, inhalation: NOAEL: 1 mg/m³, (rat, Male/Female, 6 hrs/day, 5 days/week)
Irritation to lungs and nasal cavity.

2 years, inhalation: NOAEL: 0.2 mg/m³, (rat, Male/Female, 6 hrs/day, 5 days/week)
Irritation to lung and nasal cavity.

Mutagenicity: Genetic Toxicity in Vitro: Bacterial - gene mutation assay: negative
Irritation to lung and nasal cavity.

Carcinogenicity: rat, Male/Female, inhalation, 2 years, 6 hrs/day, 5 days/week
Exposure to a level of 6mg/m³ polymeric MDI was related to the occurrence of lung tumors. This level is significantly over the TLV for MDI.

Developmental Toxicity/Teratogenicity
rat, female, inhalation, gestation days 6-15, 6 hrs/day, NOAEL (teratogenicity):
12 mg/m³, NOAEL (maternal): 4 mg/m³
No teratogenic effects observed at doses tested, Fetotoxicity seen only with maternal toxicity.

Toxicity Data for 4,4'-Diphenylmethane Diisocyanate (MDI)
Oral LD50: No Data
Dermal LD50 (rabbit): >10,000 mg/kg
Inhalation LC50 (rat): >2240 mg/m³ aerosol, 1 h

Skin Irritation: rabbit, slightly irritating
Eye Irritation: rabbit, slightly irritating
Sensitization:
Dermal: Sensitizer (guinea pig, Maximisation Test (GPMT))
Inhalation: Sensitizer (guinea pig)

Repeated Dose Toxicity:
90 days, inhalation: NOAEL: 1mg/m³, (rat, Male/Female, 6 hrs/day, 5 days/week)
Irritation to lungs and nasal cavity.

Mutagenicity:
Genetic Toxicity in Vitro:
Amer: (Salmonella typhimurium, Metabolic Activation: with/without) Positive and negative results were reported. The use of certain solvents which rapidly hydrolyze diisocyanates is suspected of producing the positive mutagenicity results.

Genetic Toxicity in Vivo:

Micronucleus Assay: negative (mouse)

Carcinogenicity: rat, Male/Female, inhalation, 2 years. 17 hrs/day, 5 days/week.
Negative

Section 12. Ecological Information

Ecological Information This product has not been tested as a whole. Component information available sources is listed below.

Ecological Data for 4,4'-Diphenylmethane Diisocyanate (MDI)
Acute and Prolonged Toxicity to Fish
LC50:>500mg/l (Zebra fish (Brachydanio rerio), 24 hrs)

Acute Toxicity to Aquatic Invertebrates
EC50: >500 mg/l (Water flea (Daphnia magna), 24 hrs)

Section 13. Disposal

Waste Disposal Method Waste must be disposed of in accordance with federal, state and local environmental control regulations. Incineration is the preferred method.

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

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

Section 15. Regulatory Information

Disclaimer

The regulatory information is not intended to be comprehensive. Other regulations may apply to this material. 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.

U.S. Federal Regulations

United States Federal Regulations:

OSHA Hazcom Standard Rating: Hazardous

US Toxic Substances Control Act: Listed on the TSCA Inventory

US EPA CERCLA Hazardous Substances (40 CFR 302)

4,4'-Diphenylmethane Diisocyanate (MDI): Reportable Quantity: 5,000 lbs.

SARA 311/312 Hazard Categories::

Acute Health Hazard, Chronic Health Hazard

US EPA Emergency Planning and Community Right-To-Know Act (EPCRA)

SARA Title III

Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A): None

US EPA Emergency Planning and Community Right-To-Know Act (EPCRA)

SARA Title III

Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required:

Polymeric Diphenylmethane Diisocyanate (pMDI)

4,4'-Diphenylmethane Diisocyanate (MDI)

US EPA Resource Conservation and Recovery Act (RCRA) composite List of Hazardous Wastes and Appendix VIII Hazardous Constituents (40 CFR 261):

If discarded in its purchased form, this product would not be a hazardous waste either by listing or by characteristic. However, under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste. (40 CFR 261.2024)

State Right-To-Know Information:

For details of your regulatory requirement, you should contact the appropriate agency in your state.

This product contains trace amounts of phenyl isocyanate (CAS# 103-71-9) and monochlorobenzene (CAS# 108-90-7) as impurities.

Massachusetts, New Jersey or Pennsylvania Right to Know Substance Lists:

CAS No: 101-68-8 - 4,4'-Diphenylmethane Diisocyanate (MDI) - 25-35% by weight

CAS No: 9016-87-9 - Polymeric Diphenylmethane Diisocyanate (pMDI) - 5-15% by weight

CAS No: 25686-28-6 - Diphenylmethane Diisocyanate (MDI) Homopolymer - 5-15% by weight

CAS No: 26447-40-5 - Diphenylmethane Diisocyanate (2,2,2,4) - 0-10%

New Jersey Environmental Hazardous Substances List and/or New Jersey, RTK Special Hazardous Substances Lists:

CAS No: 101-68-8 - 4,4'-Diphenylmethane Diisocyanate (MDI) - 25-35% by weight

CAS No: 9016-87-9 - Polymeric Diphenylmethane Diisocyanate (pMDI) - 5-15%

by weight

California Prop 65: This product does not contain any of the listed chemicals, which the state of California has found to cause cancer, birth defects or other reproductive harm:

CAS No: 75-56-9 - Residual propylene oxide (typical)

Section 16. Other Information

Revision Date

6/3/2015

HMIS Rating (Not Regulated) The HMIS Rating for this product is:
Health: 2 Flammability: 1 Reactivity: 1

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 1375 (Mod 2) Part B

Section 1. Identification

Product Identifier	RF 1375 (Mod 2) Part B		
Synonyms	30703B; Component of Polyurethane		
Manufacturer Stock Numbers	30703B		
Recommended use	Component of Polyurethane.		
Uses advised against	If material catches fire, do not direct a solid stream of water or foam into burning molten material; this may cause spattering and spread the fire.		
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 ACUTE TOXICITY - ORAL - Category 5 EYE DAMAGE/IRRITATION - Category 2B SENSITIZATION - RESPIRATORY - Category 1B SKIN CORROSION/IRRITATION - Category 3
Signal Word	Warning

Pictogram



Hazard Statements

Causes eye irritation
Causes mild skin irritation
May be harmful if inhaled
May be harmful if swallowed
May cause allergy or asthma symptoms or breathing difficulties if inhaled

Precautionary Statements

Response

If experiencing respiratory symptoms: Call a poison center or doctor immediately
If eye irritation persists: Get medical advice/attention.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF INHALED: Call a POISON CENTER or doctor immediately if you feel unwell
If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.
If skin irritation occurs: Get medical advice/attention.

Prevention

Avoid breathing dust/fume/gas/mist/ vapors/spray.
In case of inadequate ventilation wear respiratory protection.
Wash all affected areas thoroughly after handling.

Storage

Store in a well-ventilated place. Keep cool.

Disposal

Dispose of contents/container in accordance with existing federal, state and local environment control laws.

Ingredients of unknown toxicity

0%

Hazards not Otherwise Classified

Chronic Hazards

A two year feeding study in rats showed DETDA cause effects in the pancreas, liver, thyroid and eyes. An increase in the number of tumors in the liver and thyroid of male rats and in the liver and possibly mammary gland of female rats was found.

Additional Hazards

Cutting or grinding of cured material may release nuisance dust and present a respiratory hazard. See special precautions (Section 8)

Section 3. Ingredients

CAS	Ingredient Name	Weight %
65997-17-3	Glass, oxide, chemicals	<2 %
68479-98-1	Diethylenetoluenediamine (DETDA)	1-5 %
31568-06-6	Ethanol, 2-[(2-aminoethyl)amino]-, polymer with methyloxirane	1-5 %
	Polyether Polyol	20-30 %
	Polyester Polyol	25-50 %

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

Section 4. First-Aid Measures

Inhalation	Remove patient from exposure, keep warm and at rest. Obtain medical attention. Administer oxygen or artificial respiration as needed. Asthmatic symptoms may develop and may be immediate or delayed up to several hours. Extreme asthmatic reactions can be life threatening.
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	Immediately flush with plenty of clean running water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes lifting eyelids occasionally. Have eyes examined immediately and tested by medical personnel.
Ingestion	Obtain medical attention immediately. If patient is conscious, rinse mouth with water and give patient 3-4 glasses of water. Contents of stomach should be evacuated by gastric suction so as to prevent aspiration into the respiratory tract. Induce vomiting only if directed by medical personnel.

Section 5. Fire Fighting Measures

Suitable Extinguishing Media	Extinguishing media: Use alcohol-resistant foam, carbon dioxide, dry chemical or water spray when fighting fires involving this material.
Unsuitable Extinguishing Media	Do not direct a solid stream of water or foam into burning molten material due to spattering and spreading of the fire.
Special Protective Equipment for Fire Fighters	Special protective equipment for fire-fighters: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
Hazardous Decomposition Products	Burning can produce the following products: Carbon monoxide and/or carbon dioxide, oxides of nitrogen. Carbon monoxide is highly toxic if inhaled. Carbon dioxide in sufficient concentrations can act as an asphyxiant.

Section 6. Accidental Release Measures

Major Spills Spills, Leaks or Releases	For Major Spills, call CHEMTREC at 1-800-424-9300 Minimize entry of material into sewers and drainage systems. Refer to permit discharge limitations if applicable. Isolate spill area, preventing entry by unauthorized persons. Prevent skin/eye contact. Stop leak and contain material. Absorb spill with inert material (e.g. dry sand, earth). Place in an approved chemical waste container.
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Section 7. Handling and Storage

Handling	Skin and eye contact should be avoided as good industrial practice. Wearing of protective gloves and eye protection is recommended. Wash hands and contaminated skin after handling and before eating, smoking or using toilet facilities.
Storage	Store in a cool, dry place away from strong oxidizers and acids.

Section 8. Exposure Controls/Personal Protection

Occupational Exposure Limits	Ingredient Name	ACGIH TLV	OSHA PEL	STEL
	Glass, oxide, chemicals	N/A	N/A	N/A
	Diethylenetoluenediamine (DETDA)	N/A	N/A	N/A
	Ethanol, 2-[(2-aminoethyl)amino]-, polymer with methyloxirane	N/A	N/A	N/A
	Polyether Polyol	N/A	N/A	N/A
	Polyester Polyol	N/A	N/A	N/A
Personal Protective Equipment FACE_SHIELD CHEMICAL_GOGGLES PROTECTIVE CLOTHING GLOVES VENTILATION RUBBER_BOOTS Eye Wash Stations and Safety Showers	Goggles, Gloves, Apron, Face Shield, PROTECTIVE CLOTHING, RUBBER BOOTS, VENTILATION, CHEMICAL GOGGLES Face Shield Chemical Safety Goggles with Side Shields. Indirect Vented Goggles. Protective clothing should be selected and used in accordance with "Guidelines for the Selection of Chemical Protective Clothing" published by ACGIH. Neoprene, Nitrile-Butadiene rubber, butyl rubber. Thin disposable gloves should be avoided for repeated or long term use. Have proper ventilation Please wear rubber boots at all times Need readily accessible eye wash stations and safety showers. Wash at the end of each workshift and before eating, smoking or using the toilet. Promptly remove clothing that becomes contaminated. Discard contaminated leather articles. Launder or discard contaminated clothing.			
Respiratory Protection Special Precautions for Grinding, Sanding or Cutting Cured Product	Not ordinarily required Machine operations performed on cured product may release nuisance dust. Respiratory protection meeting OSHA and ANSI standards must be worn if such operations are performed. Work environment should be properly cleaned after such operations to minimize lingering respiratory hazards. Consult OSHA Hazard Communications Standard, 29 CFR Sections 1910.1200, 1915.1200, 1917.28, 1918.90, 1926.59 and 1928.21 and state and local worker or community "right to know" laws and regulations should be strictly followed. Your employees (and your customers in case of resale) should be made aware by posting and other means of the hazards and the required OSHA precautions. Provide Training for your employees about the OSHA precautions.			

Section 9. Physical and Chemical Properties

Physical State	Liquid
Color	Blue
Odor	Characteristic
Odor Threshold	N/A
Solubility	N/A
Partition coefficient Water/n-octanol	N/A
VOC%	N/A
Viscosity	N/A
Specific Gravity	1.33
Density lbs/Gal	N/A
Pounds per Cubic Foot	N/A
Flash Point	N/A
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

Glass Beads

* Glass Beads, is considered nuisance dust in a respirable form and does not present a health hazardous in the wet or cured form. Airborne particulates created during cutting, sanding or grinding should be minimized through the use of good work practices (See Section 3 and Section 8)

** Chemical identity of this product is a trade secret

Section 10. Stability and Reactivity

Chemical Stability	Stable at room temperature
Hazardous Polymerization	Will not occur
Incompatibilities	Strong oxidizing materials
Hazardous Decomposition Products	Toxic fumes of carbon monoxide, carbon dioxide, nitrogen oxide

Section 11. Toxicological Information

Toxicology Information	Toxicity has not been established for the product as a whole. However no component of this product in its present concentration is expected to be toxic.
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Section 12. Ecological Information

Ecological Information Avoid contact with feed, food or drinking water.

Section 13. Disposal

WASTE DISPOSAL METHOD: Dispose of in accord with local, state and federal regulations

Empty Container Precautions Empty containers must be handled with care due to product residue. Do not heat or cut empty container with electric or gas torch.

Section 14. Transport Information

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

Section 15. Regulatory Information

Disclaimer

The regulatory information is not intended to be comprehensive. Other regulations may apply to this material. 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.

U.S. Federal Regulations

United States Federal Regulations:

US EPA CERCLA Hazardous Substances (40 CFR 302)
Not Evaluated

SARA 311/312 Hazard Categories::
Not Evaluated

US EPA Emergency Planning and Community Right-To-Know Act (EPCRA)
SARA Title III
Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A):
Not Evaluated

US EPA Emergency Planning and Community Right-To-Know Act (EPCRA)
SARA Title III
Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required:
Not Evaluated

State Right-To-Know Information:
For details of your regulatory requirement, you should contact the appropriate agency in your state.

Massachusetts, New Jersey or Pennsylvania Right to Know Substance Lists:
Not Evaluated

New Jersey Environmental Hazardous Substances List and/or New Jersey, RTK
Special Hazardous Substances Lists:
Not Evaluated

California Prop 65: This product contains the following chemicals, which the state of California has found to cause cancer, birth defects or other reproductive harm:
None

Section 16. Other Information

Revision Date

4/3/2015

HMIS Rating (Not Regulated) The HMIS Rating for this product is:
Health: 2 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.