

# MATERIAL SAFETY DATA SHEET

## CSS POLYMERS, INC.

3482 Keith Bridge Rd, Ste 294

Cumming, GA 30041

EMERGENCY PHONE NO: 855/CSS-POLY (277-7659)

Health .....2\*

Flammability ..... 1

Reactivity ..... 1

Preparation Date: February 24, 2005

Revision Date: January 13, 2014

## SECTION 1 ..... CHEMICAL PRODUCTS IDENTIFICATION

Trade Name/Product Number: **QUICK JOINT 85 – Caulking “A PART”**

Chemical Family : Aromatic Isocyanate Prepolymer Blend

Chemical Name : Prepolymer Blend

## SECTION 2 ..... HAZARDOUS INGREDIENTS

	OSHA	ACGIH
4,4'-Diphenylmethane Diisocyanate (MDI) CAS# 101-68-8	.02 ppm Ceiling .20 mg/m3 Ceiling	.005 ppm TW .021 mg/m3 TWA
Diphenylmethane Diisocyanate (MDI) (2,2: 2,4) CAS# 26447-40-5	Not established	Not established
Modified MDI	Not established	Not established

\*For regulatory and state right to know information on these products, please refer to the regulatory information section of this MSDS.

## SECTION 3 ..... HAZARDS IDENTIFICATION

This material is classified as hazardous under OSHA Hazard Communication Standard (29 CFR 1910. 1200)

**Physical state and Appearance**      Liquid

**Color**      Yellow

**Emergency Overview**      Reacts slowly with water to produce carbon dioxide which may rupture closed containers. This reaction accelerates at higher temperatures

Inhalation at levels above the occupational exposure limit could cause respiratory sensitization and risk of serious damage to respiratory system. The onset of the respiratory symptoms may be delayed for several hours after exposure. A hyper reactive response to even minimal concentrations of diisocyanates may develop in sensitized persons.

## POTENTIAL HEALTH EFFECTS:

**Routes of Entry:** .Skin contact from liquid, vapors or aerosols. Inhalation.

### 3. HAZARDS IDENTIFICATION (Continue)

#### Human Effects and Symptoms of Overexposure:

ACUTE INHALATION: MDI vapors or mist at concentrations above the TLV can irritate (burning sensation) 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 hyperactivity can respond to concentrations below the TLV with similar symptoms as well as asthma attack. Exposure well above the TLV may lead to bronchitis, bronchial spasm and pulmonary edema (fluid in lungs). These effects are usually reversible. Chemical or hypersensitive pneumonitis, with flu-like symptoms (e.g., fever, chills) has also been reported. These symptoms can be delayed up to several hours after exposure.

CHRONIC INHALATION : As result of previous repeated overexposures or a single large dose, certain individuals develop isocyanate sensitization (chemical asthma) which will cause them to react to a later exposure to isocyanate at levels well below the TLV. These symptoms, which can include chest tightness, wheezing, cough, shortness of breath or asthma 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. Overexposure to isocyanates has also been reported to cause lung damage (including decrease in lung function) which may be permanent. Sensitization can either be temporary or permanent.

ACUTE SKIN CONTACT: Isocyanates react with skin protein and moisture and can cause irritation which may include the following symptoms: reddening, swelling, rash, scaling or blistering. Cured material is difficult to remove.

CHRONIC SKIN CONTACT : Prolonged contact can cause reddening, swelling, rash, scaling, blistering, and in some cases, skin sensitization. Individuals who have skin sensitization can develop these symptoms from contact with liquid or vapors.

ACUTE EYE CONTACT: Liquid, aerosols or vapors are irritating and can cause tearing, reddening and swelling. If left untreated, corneal damage can occur and injury is slow to heal. However, damage is usually reversible. See First Aid Measures for treatment.

CHRONIC EYE CONTACT: Prolonged vapor contact may cause conjunctivitis.

ACUTE INGESTION : Can result in irritation and corrosive action in the mouth, stomach tissue and digestive tract. Symptoms can include sore throat, abdominal pain, nausea, vomiting and diarrhea.

CHRONIC INGESTION : None found

CARCINOGENICITY : No carcinogenic activity was observed in lifetime inhalation studies in rats and mice (International Isocyanate Institute).

NTP : The National Toxicology Program reported that TDI caused an increase in the number of tumors in exposed rates over those unexposed. The TDI was administered in corn-oil and introduced into the stomach through a tube. Based on this study, the NTP has listed TDI as a substance that may reasonably be anticipated to be a carcinogen in its Fourth Annual Report on Carcinogens.

#### MEDICAL CONDITIONS

**AGGRAVATED BY EXPOSURE** : Asthma, other respiratory disorders (bronchitis, emphysema, bronchial hyperactivity), skin allergies, eczema.

GENERAL INFORMATION ..... Read the entire MSDS for a more thorough evaluation of the hazard

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#### 4. FIRST AIR MEASURES:

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FIRST AID FOR EYES : Flush with copious amount of water, preferably, lukewarm water for at least 15 minutes, holding eyelids open all the time. Refer individual to physician or ophthalmologist for immediate follow-up.

FIRST AID FOR SKIN : Remove contaminated clothing. Wash affected skin thoroughly with soap and water. Wash contaminated clothing thoroughly before reuse. For severe exposures, get under safety shower after removing clothing, then get medical attention. For lesser exposures, seek medical attention if irritation develops or persists after the area is washed.

FIRST AID FOR INHALATION: Move to an area free from risk of further exposure. Administer oxygen or artificial respiration as needed. Obtain medical attention. Asthmatic-type symptoms may develop and may be immediate or delayed up to several hours. Consult physician should this occur.

FIRST AID FOR INGESTION...: DO NOT INDUCE VOMITING. Wash mouth out with water. DO NOT GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. Consult a physician.

NOTE TO PHYSICIAN : Eyes: Stain for evidence of corneal injury. If cornea is burned, instill antibiotic steroid preparation frequently. Workplace vapors have produced reversible corneal epithelial edema impairing vision. Skin: This compound is known skin sensitizer. Treat symptomatically as for contact dermatitis or thermal burn. If burned, treat as thermal burn. Ingestion: Treat symptomatically. MDI has a very low oral toxicity. There is no specific antidote. Inducing vomiting is contraindicated because of the irritating nature of this compound. Respiratory: This compound is a known pulmonary sensitizer. Treatment is essentially symptomatic. An individual having a skin or pulmonary sensitization reaction to this material should be removed from exposure to any isocyanate.

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**5. FIRE FIGHTING MEASURES:** FLASH POINT: >260.00

F (126.6 C) Pensky-Martens Closed Cup (ASTM D-93)

FLAMMABLE LIMITS: Not available

AUTO IGNITION TEMPERATURE: > 600 °C

EXTINGUISHING MEDIA: Dry Chemical; Carbon Dioxide; Foam; Water spray for large fires.

SPECIAL FIRE FIGHTING PROCEDURES: Full emergency equipment with self-contained breathing apparatus and full protective clothing should be worn by firefighters. During a fire, MDI vapors and other irritating, highly toxic gases may be generated by thermal decomposition or combustion. (See Stability and Reactivity Section). Explosive rupture is possible. Therefore, use cold water to cool fire-exposed containers.

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**6. ACCIDENTAL RELEASE MEASURES:**

SPILL OR LEAK PROCEDURES: Evacuate and ventilate spill area; dike spill to prevent entry into water system; wear full protective equipment, including respiratory equipment during clean-up. (See Employee Protection Recommendations). Major Spill: Call UPC Corporation at 562-630-4982. If temporary control of isocyanate vapor is required, a blanket of protein foam (available at most fire departments) may be placed over the spill. Large quantities maybe pumped into closed, but not sealed, container for disposal. Minor Spill: Absorb isocyanates with sawdust or other absorbent, shovel into suitable unsealed containers, transport to well-ventilated area (outside) and treat with neutralizing solution: mixture of water (80%) with non-ionic surfactant Tergitol TMN-10 (20%), or; water (90%), concentrated ammonia (3-8%) and detergent (2%). Add about 10 parts of neutralizer per part of isocyanate, with mixing. Allow to stand uncovered for 48 hours to let CO<sub>2</sub> escape. Clean-up: Decontaminate floor with decontamination solution letting stand for at least 15 minutes.

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**7. HANDLING AND STORAGE:**

STORAGE TEMPERATURE (MIN/MAX): 70-110° F (21-43°C)

SHELF LIFE: 6 Months

SPECIAL SENSITIVITY: If container is exposed to high heat, 400° F (204 °C) it can be Pressurized and possible rupture. MDI reacts slowly with water to form CO<sub>2</sub> gas. This gas can cause Sealed containers to expand and possible rupture.

HANDLING/STORAGE PRECAUTIONS: Store in tightly closed containers to prevent moisture contamination. Do not reseal if contamination is suspected. Avoid contact with skin and eyes. Do not breathe aerosols or vapors. Warning properties (irritation of the eyes, nose and throat or odor) are not adequate to prevent chronic overexposure from inhalation. This material can produce asthmatic sensitization upon either single inhalation exposure to a relatively high concentration or upon repeated inhalation exposures to lower concentrations. Exposure to vapors of heated MDI can be dangerous. Employee education and training in the safe use and handling of this compound are required under the OSHA Hazard Communication Standard.

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**8. PERSONAL PROTECTION; EYE PROTECTION REQUIREMENTS:** Chemical goggles should be used in a splash hazard environment. For Additional protection, chemical goggles should be used in combination with a full face shield.

SKIN PROTECTION REQUIREMENTS: Permeation resistant gloves (butyl rubber, nitrile rubber, polyvinyl alcohol). However, please note that PVA degrades in water. Cover as much of the exposed skin area as possible with appropriate clothing. If skin creams are used, keep the area covered by the cream to a minimum.

VENTILATION REQUIREMENTS : Local exhaust should be used to maintain levels below the TLV whenever MDI is heated, sprayed, or aerosolized. Standard reference sources regarding industrial ventilation (i.e., ACGIH Industrial Ventilation Manual) should be consulted for guidance about adequate ventilation. The type of respiratory protection selected must comply with the requirements set forth in OSHA's Respiratory Protection Standard (29 CFR 1910.134). The type of respiratory protection available includes (1) an atmosphere-supplying respirator such as a self-contained breathing apparatus (SCBA) or a supplied air respirator (SAR) in the positive pressure or continuous flow mode, or (2) an air-purifying respirator (APR). If an APR is selected, the following conditions must be met: (1) (a) the cartridge must be equipped with an end-of-service life indicator (ESLI) certified by NIOSH, or (1) (b) a change out schedule, based on objective information or data that will ensure that the cartridges are changed out before the end of their service life, must be developed and implemented. The basis for the change out schedule must be described in the written respirator program, and (2) the airborne MDI concentration must be no greater than 10 times the TLV or PEL. The recommended APR cartridge is an organic vapor/HEPA combination cartridge (OV/P100).

MEDICAL SURVEILLANCE : Medical supervision of all employees who handle or come in contact with isocyanates is recommended. These should include pre-employment and periodic medical examinations with pulmonary function tests (FEV<sub>1</sub>, FVC as a minimum). History of adult asthma, respiratory allergies such as hay fever, eczema, history of prior isocyanate sensitization, or lack of smell (anosmia) are possible reasons for medical exclusion from isocyanate areas. Once a person is accurately diagnosed as sensitized to an isocyanate, no further exposure can be permitted.

ADDITIONAL PROTECTIVE MEASURES: Safety showers and eyewash stations should be available. Educate and train employees in safe use of product. Follow all label instructions. For additional information, contact UPC Corporation at 562-630-4982.

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**9. PHYSICAL AND CHEMICAL PROPERTIES:**

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PHYSICAL FORM..... Viscous Liquid  
 COLOR..... Pale yellow to straw colored yellow  
 ODOR..... Slightly musty  
 MOLECULAR WEIGHT..... not established  
 BOILING POINT ..... > 482° F (250° C)  
 MELTING/FREEZING POINT.....no data  
 SOLUBILITY IN WATER.....Reacts slowly with water to liberate CO<sub>2</sub> gas  
 SPECIFIC GRAVITY ..... 1.08 @ 77° F (25° C)  
 BULK DENSITY ..... 9.0 lbs/gal  
 % VOLATILE BY VOLUME .....Negligible  
 VAPOR PRESSURE..... not established  
 VAPOR DENSITY ..... not established  
 FLASH POINTS.....closed cup: > 110° C (230° F)

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**10. STABILITY AND REACTIVITY:**

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STABILITY : This is a stable material.  
 HAZARDOUS POLYMERIZATION : May occur; Contact with moisture, other materials which react with isocyanates, or temperatures above 350°F (177 C), may cause polymerization.  
 INCOMPATIBILITIES : Water, amines, strong bases, alcohols. Will cause some corrosion to copper alloys and aluminum.  
 INSTABILITY CONDITIONS.....: Not noted  
 DECOMPOSITION PRODUCTS : By high heat and fire: carbon monoxide, oxides of nitrogen, traces of HCN, TDI vapors or aerosols.

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**11. TOXICOLOGICAL INFORMATION:**

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ACUTE TOXICITY  
 ORAL LD50.....: Rat >5000 mg/kg (No deaths)(Estimate)  
 DERMAL LD50 : Rabbit >5,000 mg/kg (No deaths) (Estimate)  
 INHALATION LC50 : no data  
 IRRITATION EFFECTS DATA:\_\_\_ Irritation data based on estimates  
 CHRONIC/SUBCHRONIC DATA : No delayed, sub chronic or chronic test data are known.

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**12. ECOLOGICAL INFORMATION:**

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No data.

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**13. DISPOSAL CONSIDERATIONS:**

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WASTE DISPOSAL METHOD: Waste must be disposed of in accordance with federal, state, and local environmental control regulations. Incineration is the preferred method.

EMPTY CONTAINER PRECAUTIONS: Empty containers must be handled with care due to products residue. Decontaminate containers prior to disposal. Empty decontaminated containers should be crushed to prevent reuse. **DO NOT HEAT OR CUT EMPTY CONTAINER WITH ELECTRIC OR GAS TORCH.** (See Fire Fighting Measures & Stability and Reactivity Sections). Gases may be highly toxic.

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**14. TRANSPORTATION INFORMATION:**

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DOT (DOMESTIC SURFACE)

PROPER SHIPPING NAME...: RESIN COMPOUND  
HAZARD CLASS OR DIVISION.....: Not-Regulated

IMO / IMDG CODE (OCEAN)

Proper Shipping Name...: RESIN COMPOUND  
HAZARD CLASS OR DIVISION.....: Not-Regulated

ICAO/ IATA (AIR)

Proper Shipping Name...: RESIN COMPOUND  
HAZARD CLASS OR DIVISION.....: Not-Regulated

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**15. REGULATORY INFORMATION:**

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OSHA Hazard Communication Standard (29 CFR1910.1200 hazard class (s)...: None .

T S C A S T A T U S ...: O n T S C A I n v e n t o r y

SARA TITLE III:

SECTION 302 EXTREMELY

HAZARDOUS SUBSTANCES...: None

SECTION 311 / 312

HAZARD CATEGORIES...: None

SECTION 313

TOXIC CHEMICALS ...: None

Federal Regulations 261.20-24.

The following chemicals are specifically listed by individual states; other product specific health and safety data in other sections of the MSDS may also be applicable for state requirements. For details on your regulatory requirements you should contact the appropriate agency in your state.

<u>/CAS NUMBER</u>	<u>COMPONENT NAME</u> <u>CONCENTRATION</u>	<u>STATE CODE</u>
4,4'-Diphenylmethane Diisocyanate (MDI) CAS# 101-68-8	<1%	PA1, PA4, FL, IL, MA, RI
Diphenylmethane Diisocyanate (MDI) (2,2: 2,4) CAS# 26447-40-5	<1%	NJ1, NJ2, NJ4, CN2, PA3, NJ4

FL = Florida Substance List

IL = Illinois Toxic Substances List

MA = Massachusetts Hazardous Substance List

NJ1 = New Jersey Hazardous Substance List

NJ2 = New Jersey Environmental Hazardous Substance List

NJ4 = New Jersey Other – include in 5 predominant ingredients > 1%

PA1 = Pennsylvania Hazardous Substance List

PA3 = Pennsylvania Non-hazardous present at 3% or greater

PA4 = Pennsylvania Environmental Hazardous Substance List RI

= Rhode Island List of Designated Substances

CN2 = Canada WHMIS Ingredient Disclosure List over 0.1%

**CALIFORNIA PROPOSITION 65 SUBSTANCE(S)** No ingredients listed

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**16. OTHER INFORMATION:**

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NFPA 704M RATINGS:      Health              Flammability              Reactivity              Other  
   2                              1                              1  
0 = Insignificant 1 = Slight 2 = Moderate 3 = High 4 = Extreme

HMIS RATINGS:              Health              Flammability              Reactivity  
   2\*                              1                              1  
0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe \* =  
Chronic Health Hazard

UPC Corporation method of hazard communication is comprised of Product Labels and Material Safety Data Sheets. HMIS and NFPA ratings are provided by UPC Corporation as a customer service.

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This information is furnished without warranty, expressed or implied, except that it is accurate to the best knowledge of UPC Corporation. The data on this sheet relates only to the specific material designated herein. UPC Corporation assumes no legal responsibility for use or reliance upon these data.  
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# MATERIAL SAFETY DATA SHEET

**CSS POLYMERS, INC**  
3482 Keith Bridge Rd., Ste 294  
Cumming, GA 30041  
EMERGENCY PHONE NO.: 855/CSS-POLY (277-7659)

Health..... 3\*  
Flammability ..... 1  
Reactivity ..... 0  
Preparation Date: February 24, 2005  
Revision Date: January 13, 2014

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## SECTION 1 .....CHEMICAL PRODUCT IDENTIFICATION

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Trade Name/Product Number: **QUICK JOINT 85-caulking "B PART"**  
Chemical Family ..... : Polyamine Blend  
Chemical Name ..... : Polyoxypropylenediamine

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## SECTION 2 ..... HAZARDOUS INGREDIENTS

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	CAS #	*Exposure Limits
Poly (oxymethyl-1,2-ethanediy),alpha- With 2-ethyl-2(hydroxymethyl)1,3-propaneDiol (3:1)	39423-51-3	
2,4 diamino-3,5 diethyltoluene	2095-02-5	
2,6 diamino-3,5 diethyltoluene	2095-01-4	
3 ethyltoluene-2,4/2,5-diamine	68966-84-7	

\*For regulatory and state right to know information on this product, please refer to the regulatory information section of this MSDS.

Product and/or component(s) Carcinogenic according to:  
OSHA IARC NTP OTHER **NONE X**

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## SECTION 3 .....HAZARDS IDENTIFICATION

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\* **EMERGENCY OVERVIEW** \*  
\* \*  
\* **WARNING! DANGER! Corrosive-causes eye and skin burns.** \*  
\* **Harmful or Fatal if swallowed.** \*  
\* **Causes respiratory tract irritation and can cause damage.** \*  
\*\*\*\*\*

### POTENTIAL HEALTH EFFECTS:

Primary Route of Exposure:  
Eye X Skin X Inhalation X  
Ingestion

### EFFECTS OF OVEREXPOSURE ACUTE:

Eyes: Causes irritation, experienced as pain, with excess blinking and tear production, and seen as extreme redness and swelling of the eye and burns of the eye. Severe eye damage may cause blindness.  
Skin: Causes severe irritation with pain, severe excess redness and



swelling with chemical burns, blister formation, and possible tissue destruction. Other than the potential skin irritation effects noted above acute (short term) adverse effects are not expected from brief skin contact; see other effects below and Section 11 for information regarding potential long term effects.

**Inhalation:** Vapors or mist especially as generated from heating the material or as from exposure in poorly ventilated areas or confined spaces, are irritating and cause nasal discharge, coughing, and discomfort in nose and throat. Prolonged or repeated overexposure may result in lung damage.

**Ingestion:** Causes burning of mouth, throat, and stomach with abdominal and chest pain, nausea, vomiting, diarrhea, thirst, weakness, and collapse. Aspiration may occur during swallowing or vomiting, resulting in lung damage.

**Sensitization Properties:** Unknown.

**Chronic:**

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

**Medical Conditions Aggravated by Exposure:**

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

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**4. FIRST AIR MEASURES:**

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**Eyes:**

Immediately flush eyes with large amounts of running water for at least 15 minutes. Hold eyelids apart while flushing to rinse entire surface of eye and lids with water. Do not attempt to neutralize with chemical agents. Obtain medical attention immediately. Continue flushing for an additional 15 minutes if medical attention is not immediately available.

**Skin:**

Immediately remove contaminated clothing and shoes. Under a safety shower, flush skin thoroughly with large amounts of running water for at least 15 minutes. Do not attempt to neutralize with chemical agents. Get medical attention immediately. Discard or decontaminate clothing and shoes before reuse.

**Ingestion:**

If person is conscious and can swallow, immediately give two glasses of water (16 oz) but do not induce vomiting. This material is corrosive, if vomiting occurs, give fluids again. Have a physician determine if condition of patient will permit induction of vomiting or evacuation of stomach. Do not give anything by mouth to an unconscious or convulsing person.

**Inhalation:**

If inhaled, remove to fresh air. If not breathing or in respiratory distress, clear person's airway and start artificial respiration. With a physician's advice, give supplemental oxygen using a bag-valve mask or manually triggered oxygen supply.

**Other Instructions:**

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.

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**5. FIRE-FIGHTING MEASURES:**

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Ignition Temperature – AFT (degrees C):  
Not Determined

Flash Point (degrees C):  
185 (365°F) (PMCC)

Flammable Limits % (Lower-Upper):  
Lower: Not Determined  
Upper: Not Determined

Recommended Fire Extinguishing Agents and Special Procedures:

Use water spray, dry chemical, foam, or carbon dioxide to extinguish flames. Use water spray to cool Fire-exposed containers. Water or foam may cause frothing.

Unusual or Explosive Hazards:  
None

Special Protective Equipment for Firefighters:

Wear special chemical protective clothing and positive pressure self contained breathing apparatus. Approach fire from upwind to avoid hazardous vapors and toxic decomposition products. Decontaminate or discard any clothing that may contain chemical residues.

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**6. HANDLING AND STORAGE:**

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**Precautions to be taken in**

Handling:

Minimum feasible handling temperatures should be maintained. Eye wash and safety shower should be available nearby when this product is handled or used.

Storage:

Periods of exposure to high temperatures should be minimized. Water contamination should be avoided if stored above 100°F, a nitrogen atmosphere is recommended.

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**7. EXPOSURE CONTROLS / PERSONAL PROTECTION:**

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Protective Equipment (Type)

Eye/Face Protection:

Avoid eye contact. Chemical type goggles with face shield must be worn. Do not wear contact lenses.

Skin Protection:

Protective clothing such as coveralls or lab coats must be worn. Launder or dry-clean when soiled. Gloves resistant to chemicals and petroleum distillates required. When handling large quantities, impervious suits, gloves, and rubber boots must be worn.

Respiratory Protection:

Airborne concentrations should be kept to lowest levels possible. If vapor, mist or dust is generated and the occupational exposure limit of the product, or any component of the product is exceeded, use appropriate NIOSH OR MSHA approved air purifying or air supplied respirator after determining the airborne concentration of the contaminant. Air supplied respirators should always be worn when airborne concentration of the contaminant or oxygen content is unknown.

Ventilation:

Local exhaust ventilation recommended if generating vapor, dust or mist. If exhaust ventilation is not available or inadequate use MSHA or NIOSH approved respirator as appropriate.

Exposure Limit for the Total Product:

None established for product.

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**8. PHYSICAL AND CHEMICAL PROPERTIES:**

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**Appearance:** Light yellow liquid or can be pigmented  
**Odor:** Ammonia-like odor  
**Specific Gravity** (water-1): 1.05  
pH: not established  
Viscosity: 1100 cps. At 25°C (77°F)  
VOC Content: 0  
Solubility in Water (%):.1-1

**Boiling Point** (degrees C): Not Determined  
**Melting/Freezing Point** (degrees C): Not applicable  
**Vapor Pressure:** .9 mmHg at 234.4 C (454°F)  
Vapor Density (Air = 1): Not applicable  
Other: None

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**9. STABILITY AND REACTIVITY:**

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This Material Reacts Violently With: Air Water Heat Strong Oxidizers                      Other X **None of These**

Comments:

This material reacts violently with acids.

Products Evolved When Subjected in Heat or Combustion:

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.

Hazardous Polymerizations:

DO NOT OCCUR

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**10. TOXICOLOGICAL INFORMATION:**

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TOXICOLOGICAL INFORMATION (ANIMAL TOXICITY DATA)

**Oral:** LD50 .45 g/kg (rat) toxic

**Inhalation:** Not Determined

**Dermal:** LD50 2.09 g/kg (rabbit) practically non-toxic

IRRITATION INDEX, ESTIMATION OF IRRITATION (SPECIES)

**Skin:** (Draize) > 6.50 – 8.00 /8.0 (rabbit) corrosive

**Eyes:** (Draize) > 80.00 / 110 (rabbit) extremely irritating

**Sensitization:** Not Determined

OTHER: None

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**11. DISPOSAL CONSIDERATIONS:**

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Waste Disposal Methods:

This product has been evaluated for RCRA characteristics and does not meet the criteria of a hazardous waste if discarded in its purchased form. Under RCRA, it is the responsibility of the user of the product to determine at the time of disposal, whether the product meets RCRA criteria for hazardous waste. This is because product uses transformations, mixtures, processes, etc. may render the resulting materials hazardous.

Remarks: None

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**12. TRANSPORT INFORMATION:**

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Transportation

**DOT:**

Proper Shipping Name: Corrosive liquids, toxic, N.O.S. (polyoxypropylenediamine)

Hazard Class: 8 (6.1)  
Identification Number: UN2922  
Packing Group: III  
12.  
Label Required: Corrosive (toxic)

**IMDG**

Proper Shipping Name: Corrosive liquids, toxic, N.O.S. (polyoxypropylenediamine)  
Hazard Class: 8 (6.1)  
Identification Number: UN 2922  
Packing Group: III  
Label Required: Corrosive (toxic)

**ICAO**

Proper Shipping Name: Corrosive liquids, toxic, N.O.S. (polyoxypropylenediamine)  
Hazard Class: 8 (6.1)  
Identification Number: UN 2922  
Packing Group: III  
Label Required: Corrosive (toxic)

**TDG**

Proper Shipping Name: Corrosive liquids, toxic, N.O.S. (polyoxypropylenediamine)  
Hazard Class: 8 (6.1)  
Identification Number: UN 2922  
Packing Group: III  
Label Required: Corrosive (toxic)

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**13. REGULATORY INFORMATION:** Federal

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Regulations:

SARA Title III:

Section 302/304 Extremely Hazardous Substances  
None

Section 311 Hazardous Categorization:

Acute X Chronic Fire Pressure Reactive N/A

Section 313 Toxic Chemical

None

CERCLA 102(a)/DOT Hazardous Substances:

None

States Right-to-Know Regulations:

None

State list: CT (Connecticut), FL (Florida), IL (Illinois), MI (Michigan), LA (Louisiana),  
MA (Massachusetts), NJ (New Jersey), PA (Pennsylvania), RI (Rhode Island)

California Prop 65:

The following detectable components of this product are substances, or belong to classes of substances,  
Known to the State of California to cause cancer and/or reproductive toxicity.

INTERNATIONAL REGULATIONS:

TSCA Inventory Status:

This product, or its components, are listed on or are exempt from the Toxic Substance Control Act (TSCA)

Chemical Substance Inventory.

WHMIS Classification:

Class D, Div. 1, Subdiv. B: Toxic Class E: Corrosive

CANADA Inventory Status:

This product, or its components, are listed on or are exempt from the Canadian Domestic Substance List (DSL).

EINECS Inventory Status:

European Inventory of Existing

Chemical Substances (INECS) or the European List of Notified Chemical Substances (ELINCS).

AUSTRALIAN Inventory Status:

This product, or its components, are listed on or are exempt from the Australian Inventory of Chemical Substances (AICS).

JAPAN Inventory Status:

This product, or its components, are listed on or are exempt from the Japan Ministry of International Trade and Industry (MITI) inventory.

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**14. ENVIRONMENTAL INFORMATION:**

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Aquatic Toxicity: Not Determined

Mobility: Not Determined

Persistence and Biodegradability: Not Determined

Potential to Bioaccumulation: Not Determined

Remarks: None

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