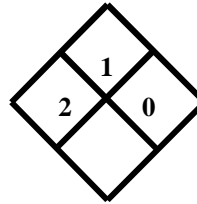


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**Effective Date:** 7/19/07**Material Safety Data Sheet**

MSDS No: 6018

**1. PRODUCT IDENTIFICATION****Trade Name:** RenLam 1700-1**Chemical Family:** Epoxy

NFPA RATING

<b>Health:</b>	<b>2</b>
<b>Flammability:</b>	<b>1</b>
<b>Reactivity:</b>	<b>0</b>
<b>Personal Protection:</b>	

HMIS RATING

**Synonyms:**  
RP 1700-1 Resin

**Intended Use or Product Type:** Laminating resin**2. COMPOSITION / INFORMATION ON INGREDIENTS**

O S H A	CAS No.	CHEMICAL IDENTITY	EXPOSURE LIMITS				CARCINOGEN STATUS			
			ACGIH		OSHA		MFR.	IARC	NTP	OSHA
			TWA	STEL	PEL	STEL				
*	25068-38-6	Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane Bisphenol A diglycidyl ether polymer Common Name: Concentration 60.00 - 100.00 % by wt	NE	NE	NE	NE	NE	NR	NR	NR
*	3101-60-8	Oxirane, [[4-(1,1-dimethylethyl)phenoxy]methyl]-Butylphenyl glycidyl ether Common Name: Concentration 5.00 - 10.00 % by wt	NE	NE	NE	NE	NE	NR	NR	NR
*	68609-97-2	Oxirane, mono[(C12-14-alkyloxy)methyl] derivs. C12 and C14 Alkyl Glycidyl Ethers Common Name: Concentration 10.00 - 30.00 % by wt	NE	NE	NE	NE	NE	NR	NR	NR

\* = OSHA Hazardous Ingredient

**3. HAZARDS IDENTIFICATION**

**Emergency Overview:** Causes skin and eye irritation. May cause allergic skin reaction.

Effective Date: 7/19/07

**Primary Route(s) of Entry:** Dermal; heated product may produce inhalable vapors.

#### **4. FIRST AID MEASURES**

**Ingestion:** Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Seek immediate medical attention.

**Skin:** Immediately wash with soap and water. Remove contaminated clothing and launder before reuse. Destroy contaminated shoes. Seek immediate medical attention.

**Inhalation:** Remove to fresh air. Seek immediate medical attention.

**Eyes:** Immediately flush eyes with water for at least 15 minutes. Seek immediate medical attention.

**Overexposure Effects:** Causes skin and eye irritation. May cause allergic skin reaction.

**Medical Conditions Aggravated by Exposure:** Skin and eye conditions.

**Additional Information:** Referral to a physician is recommended if there is any question about the seriousness of any injury.

#### **5. FIRE FIGHTING MEASURES**

<b>Flash Point:</b>	> 200°F (> 93 °C)
<b>Flash Point Method Used:</b>	Estimated
<b>Flammable Limits in Air (Lower - % by volume):</b>	Not Determined
<b>Flammable Limits in Air (Upper - % by volume):</b>	Not Determined

**Fire Fighting Extinguishing Media:** Carbon dioxide, dry chemical, foam, water.

**Fire Fighting Equipment:** Use self-contained breathing apparatus.

**Fire and Explosion Hazards:** Decomposition and combustion products may be toxic.

#### **6. ACCIDENTAL RELEASE MEASURES**

**Accidental Release Measures:** Remove spillage by absorbing in absorbent material.

#### **7. HANDLING AND STORAGE**

**Signal Word:** Warning!

**Precautions:** Can cause skin irritation, eye irritation, and allergic skin reaction. Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling.

**Other Handling Information:** Nuisance dust may be generated when sanding or sawing cured material.

Effective Date: 7/19/07

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Skin Protection:** Wear impermeable gloves.

**Respiratory Protection:** Use NIOSH approved organic vapor cartridge respirator when vapor/mist exposure is likely.

**Eye Protection:** Wear splash-proof chemical goggles.

**Engineering Controls:** General mechanical and local exhaust in accordance with ACGIH recommendations.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Color:</b>	Clear to Slightly Hazy Amber
<b>Odor:</b>	Slight
<b>Physical State:</b>	Liquid
<b>Solubility in Water:</b>	Insoluble
<b>Vapor Pressure:</b>	0.05 mm Hg at 300°F (149 °C)
<b>Specific Gravity:</b>	1.12 (water = 1)
<b>Boiling Point:</b>	Not Determined
<b>Melting Point:</b>	Not Determined
<b>Evaporation Rate:</b>	Not Determined
<b>Density:</b>	Not Determined
<b>Vapor Density:</b>	Not Determined
<b>VOC:</b>	0 g/L
<b>pH:</b>	Not Determined
<b>Coefficient of water/oil:</b>	Not Determined

**Percent Volatile:** Not determined.

## 10. STABILITY AND REACTIVITY

**Conditions to Avoid:** Excessive heat for prolonged periods of time.

**Stability:** Stable.

**Incompatibility:** Strong oxidizers, acids and bases.

**Hazardous Decomposition Products:** Combustion may form toxic materials, such as carbon dioxide, carbon monoxide.

**Hazardous Polymerization:** Will not occur.

## 11. TOXICOLOGICAL INFORMATION

**Sensitization:** Possible in susceptible individuals.

**Carcinogenicity:** Based on several dermal studies in mice, IARC had concluded in 1999 that diglycidyl ether of bisphenol A is not classifiable as a human carcinogen (Group 3) and has limited evidence of carcinogenicity in animals.

Effective Date: 7/19/07

**Skin Irritation:** Irritant.**Eye Irritation:** Irritant.**Reproduction:** For diglycidyl ether of bisphenol A- There were no treatment-related histologic changes noted nor effects on reproductive performance in rats at any oral dose tested.**Teratogenicity:** For diglycidyl ether of bisphenol A- No adverse effects on embryonic or fetal development was observed in rabbits after dermal exposure.**Mutagenicity:** For diglycidyl ether of bisphenol A- In vitro tests showed mutagenic effects which were not observed with in vivo tests.**Sub-Chronic:** Diglycidyl ether of bisphenol A, applied to the skin of rats five times per week for approximately 13 weeks, caused no apparent systemic toxicity with the exception of decreased body weight and body weight gain.

## 12. ECOLOGICAL INFORMATION

## 13. DISPOSAL CONSIDERATIONS

**Waste Disposal Method:** Consult qualified local or corporate personnel for method that will comply with local, state and federal health and environmental regulations.

## 14. TRANSPORT INFORMATION

**DOT: Non-Bulk****Proper Shipping Name:** Not Regulated**IATA: Non-Bulk****Proper Shipping Name:** Not Regulated**IMDG: Non-Bulk****Proper Shipping Name:** Not Regulated**TDG: Non-Bulk****Proper Shipping Name:** Not Regulated

## 15. REGULATORY INFORMATION

### US Federal Regulations:

**Occupational Safety and Health Act (OSHA):** This Material Safety Data Sheet (MSDS) has been prepared in compliance with the federal OSHA Hazard Communication Standard 29 CFR 1910.1200. This product is considered to be a hazardous chemical under that standard.**Resource Conservation and Recovery Act (RCRA):** Not a hazardous waste under RCRA (40 CFR 261).**SARA Title III: Section 313 Toxic Chemical List (TCL):** This product does not contain any chemicals for routine annual toxic chemical release reporting under Section 313 (40 CFR 372).

Effective Date: 7/19/07

**TSCA Section 8(b) - Inventory Status:** All chemical components of this product are in compliance with TSCA inventory requirements.

**TSCA Section 12(b) - Export Notification:** This product does not contain any chemical(s) that are subject to a Section 12(b) export notification.

### International Regulations:

**Canadian Inventory Status:** This product contains only chemicals that are currently listed on the Canadian Domestic Substance List.

**Canadian WHMIS:** This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations. D2B

### State Regulations:

**California Proposition 65:** This product does not contain any chemicals currently on the California list of Known Carcinogens and Reproductive Toxins.

**Pennsylvania Right-to-Know:** The following is required composition information:

Chemical Name: Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane

Common Name: Bisphenol A diglycidyl ether polymer

CAS Number: 25068-38-6

Comment: Not on Pennsylvania Hazardous Substance List

Chemical Name: Oxirane, mono[(C12-14-alkyloxy)methyl] derivs.

Common Name: C12 and C14 Alkyl Glycidyl Ethers

CAS Number: 68609-97-2

Comment: Not on Pennsylvania Hazardous Substance List

Chemical Name: Oxirane, [[4-(1,1-dimethylethyl)phenoxy]methyl]-

Common Name: Butylphenyl glycidyl ether

CAS Number: 3101-60-8

Comment: Not on Pennsylvania Hazardous Substance List

## 16. OTHER INFORMATION

**MSDS No:** 6018  
**Approved By:** Dianne Blessing  
**Title:** EH&S Specialist

**Disclaimer:** The information and recommendations contained herein are based upon tests in controlled laboratory conditions, are believed to be correct, and are provided for the sole purpose of hazard communication as part of Huntsman's product safety program. This product has not been tested for, and therefore is not recommended or suitable for, uses for which prolonged contact with mucous membranes, abraded skin, or blood is intended or likely, or for uses for which implantation within the human body is intended, and Huntsman assumes no liability for any such uses.

The information and recommendations contained herein are not intended to constitute performance information concerning the product, which is available in separate technical data sheets available from Huntsman upon request. Users are urged, and are

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**Effective Date: 7/19/07**

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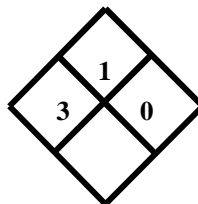
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**Effective Date:** 7/19/07**Material Safety Data Sheet**

MSDS No: 6017

**1. PRODUCT IDENTIFICATION****Trade Name:** Ren 1700-1**Chemical Family:** Accelerated Amine

NFPA RATING

<b>Health:</b>	<b>3*</b>
<b>Flammability:</b>	<b>1</b>
<b>Reactivity:</b>	<b>0</b>
<b>Personal Protection:</b>	

HMIS RATING

**Synonyms:**

RP 1700-1 Hardener

**Intended Use or Product Type:** Laminating hardener**2. COMPOSITION / INFORMATION ON INGREDIENTS**

O S H A	CAS No.	CHEMICAL IDENTITY	EXPOSURE LIMITS				CARCINOGEN STATUS			
			ACGIH		OSHA		MFR.	IARC	NTP	OSHA
			TWA	STEL	PEL	STEL				
*	112-24-3 Common Name: Concentration	1,2-Ethanediamine, N,N'-bis(2-aminoethyl)- Triethylenetetramine 10.00 - 30.00 % by wt	NE	NE	NE	NE	NE	NR	NR	NR
*	25154-52-3 Common Name: Concentration	Phenol, Nonyl- Nonyl Phenol 1.00 - 5.00 % by wt	NE	NE	NE	NE	NE	NR	NR	NR
*	26950-63-0 Common Name: Concentration	1,2-Ethanediamine, N,N'-bis(2-aminoethyl)-, polymer with methyloxirane Propoxylated Triethylenetetramine 40.00 - 70.00 % by wt	NE	NE	NE	NE	NE	NR	NR	NR
*	69-72-7 Common Name: Concentration	Benzoic acid, 2-hydroxy- Salicylic acid 7.00 - 13.00 % by wt	NE	NE	NE	NE	NE	NR	NR	NR

\* = OSHA Hazardous Ingredient

### 3. HAZARDS IDENTIFICATION

**Emergency Overview:** Corrosive - causes eye burns. Causes irritation if inhaled and can cause skin irritation. Can cause allergic respiratory reaction and allergic skin reaction. Can be harmful if absorbed through skin and may be harmful if swallowed.

**Primary Route(s) of Entry:** Dermal; heated product may produce inhalable vapors.

**Chronic:** Overexposure may have effects on kidney and liver. Possible mutagen.

### 4. FIRST AID MEASURES

**Ingestion:** Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Seek immediate medical attention.

**Skin:** Immediately wash with soap and water. Remove contaminated clothing and launder before reuse. Destroy contaminated shoes. Seek immediate medical attention.

**Inhalation:** Remove to fresh air. Seek immediate medical attention.

**Eyes:** Immediately flush eyes with water for at least 15 minutes. Seek immediate medical attention.

**Overexposure Effects:** Corrosive - causes eye burns. Causes irritation if inhaled and can cause skin irritation. Can cause allergic respiratory reaction and allergic skin reaction. Can be harmful if absorbed through skin and may be harmful if swallowed.

**Medical Conditions Aggravated by Exposure:** Skin and eye conditions.

**Additional Information:** Referral to a physician is recommended if there is any question about the seriousness of any injury.

### 5. FIRE FIGHTING MEASURES

<b>Flash Point:</b>	> 340°F (> 171 °C)
<b>Flash Point Method Used:</b>	Open Cup
<b>Flammable Limits in Air (Lower - % by volume):</b>	Not Determined
<b>Flammable Limits in Air (Upper - % by volume):</b>	Not Determined

**Fire Fighting Extinguishing Media:** Carbon dioxide, dry chemical, foam, water.

**Fire Fighting Equipment:** Use self-contained breathing apparatus.

**Fire and Explosion Hazards:** Decomposition and combustion products may be toxic.

### 6. ACCIDENTAL RELEASE MEASURES

Effective Date: 7/19/07

**Accidental Release Measures:** Remove spillage by absorbing in absorbent material.

## 7. HANDLING AND STORAGE

**Signal Word:** Danger!

**Precautions:** Corrosive - causes eye burns. Causes irritation if inhaled and can cause skin irritation. Can cause allergic respiratory reaction and allergic skin reaction. Can be harmful if absorbed through skin and may be harmful if swallowed. Do not get in eyes. Avoid breathing vapor or mist. Avoid contact with skin and clothing. Avoid tasting or swallowing. Keep container closed when not in use. Use with adequate ventilation. Wash thoroughly after handling. Notice! Overexposure may have effects on kidney and liver. Possible mutagen.

**Other Handling Information:** Nuisance dust may be generated when sanding or sawing cured material.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Skin Protection:** Wear impermeable gloves.

**Respiratory Protection:** Use NIOSH approved organic vapor cartridge respirator when vapor/mist exposure is likely.

**Eye Protection:** Wear splash-proof chemical goggles.

**Engineering Controls:** General mechanical and local exhaust in accordance with ACGIH recommendations.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Color:</b>	Clear Amber
<b>Odor:</b>	Slight Ammoniacal
<b>Physical State:</b>	Liquid
<b>Solubility in Water:</b>	Moderate
<b>Vapor Pressure:</b>	Not Determined
<b>Specific Gravity:</b>	1.02 - 1.06 (water = 1)
<b>Boiling Point:</b>	Not Determined
<b>Melting Point:</b>	Not Determined
<b>Evaporation Rate:</b>	Not Determined
<b>Density:</b>	Not Determined
<b>Vapor Density:</b>	Not Determined
<b>VOC:</b>	104.52 g/L
<b>pH:</b>	Not Determined
<b>Coefficient of water/oil:</b>	Not Determined

**Percent Volatile:** Not determined.

## 10. STABILITY AND REACTIVITY

**Conditions to Avoid:** Excessive heat for prolonged periods of time.

Effective Date: 7/19/07

**Stability:** Stable.**Incompatibility:** Strong oxidizers, acids and bases.**Hazardous Decomposition Products:** Combustion may form toxic materials, such as carbon dioxide, carbon monoxide.**Hazardous Polymerization:** Will not occur.

## **11. TOXICOLOGICAL INFORMATION**

**Acute Oral Effects (LD50):** Component(s) are slightly toxic, 500 - 5000 mg/kg (rat).

Salicylic acid= 891 mg/kg (rat)

Triethylenetetramine= 2500 - 4340 mg/kg (rat)

**Acute Dermal Toxicity (LD50):** Component(s) are toxic, 200 - 1000 mg/kg (rabbit).

Triethylenetetramine= 550 - 800 mg/kg (rabbit)

**Acute Inhalation Exposure Effects:** Respiratory irritant.**Sensitization:** May cause allergic skin reaction and respiratory sensitivity in some people.**Skin Irritation:** Irritant.**Eye Irritation:** Corrosive. Causes burns.

## **12. ECOLOGICAL INFORMATION**

## **13. DISPOSAL CONSIDERATIONS**

**Waste Disposal Method:** Consult qualified local or corporate personnel for method that will comply with local, state and federal health and environmental regulations.

## **14. TRANSPORT INFORMATION**

**DOT: Non-Bulk****Proper Shipping Name:** Not Regulated**IATA: Non-Bulk****Proper Shipping Name:** Not Regulated**IMDG: Non-Bulk****Proper Shipping Name:** Not Regulated**TDG: Non-Bulk****Proper Shipping Name:** Not Regulated

## **15. REGULATORY INFORMATION**

Effective Date: 7/19/07

**US Federal Regulations:**

**Occupational Safety and Health Act (OSHA):** This Material Safety Data Sheet (MSDS) has been prepared in compliance with the federal OSHA Hazard Communication Standard 29 CFR 1910.1200. This product is not considered to be a hazardous chemical under that standard.

**Resource Conservation and Recovery Act (RCRA):** Not a hazardous waste under RCRA (40 CFR 261).

**SARA Title III: Section 313 Toxic Chemical List (TCL):** This product does not contain any chemicals for routine annual toxic chemical release reporting under Section 313 (40 CFR 372).

**TSCA Section 8(b) - Inventory Status:** All chemical components of this product are in compliance with TSCA inventory requirements.

**TSCA Section 12(b) - Export Notification:** This product does not contain any chemical(s) that are subject to a Section 12(b) export notification.

**International Regulations:**

**Canadian Inventory Status:** This product contains only chemicals that are currently listed on the Canadian Domestic Substance List.

**Canadian WHMIS:** This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations. D1B D2A D2B

**State Regulations:**

**California Proposition 65:** This product does not contain any chemicals currently on the California list of Known Carcinogens and Reproductive Toxins.

**Pennsylvania Right-to-Know:** The following is required composition information:

Chemical Name: 1,2-Ethanediamine, N,N'-bis(2-aminoethyl)-, polymer with methyloxirane  
Common Name: Propoxylated Triethylenetetramine  
CAS Number: 26950-63-0  
Comment: Not on Pennsylvania Hazardous Substance List

Chemical Name: 1,2-Ethanediamine, N,N'-bis(2-aminoethyl)-  
Common Name: Triethylenetetramine  
CAS Number: 112-24-3  
Comment: Hazardous Substance

Chemical Name: Benzoic acid, 2-hydroxy-  
Common Name: Salicylic acid  
CAS Number: 69-72-7  
Comment: Not on Pennsylvania Hazardous Substance List

Chemical Name: Phenol, Nonyl-  
Common Name: Nonyl Phenol  
CAS Number: 25154-52-3  
Comment: Hazardous Substance

Effective Date: 7/19/07

**16. OTHER INFORMATION**

**MSDS No:** 6017  
**Approved By:** Dianne Blessing  
**Title:** EH&S Specialist

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Asia Pacific Emergency Phone: (65) 6336-6011

**Effective Date:** 8/27/08

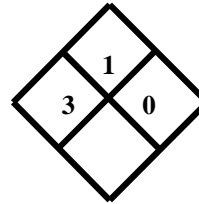
**Material Safety Data Sheet**

MSDS No: 5785

**1. PRODUCT IDENTIFICATION**

**Trade Name:** Ren 956

**Chemical Family:** Amine



NFPA RATING

<b>Health:</b>	<b>3</b>
<b>Flammability:</b>	<b>1</b>
<b>Reactivity:</b>	<b>0</b>
<b>Personal Protection:</b>	

HMIS RATING

**Synonyms:**  
H 956 Hardener

**Intended Use or Product Type:**

Amine hardener

**2. COMPOSITION / INFORMATION ON INGREDIENTS**

O S H A	CAS No.	CHEMICAL IDENTITY	EXPOSURE LIMITS				MFR.	CARCINOGEN STATUS		
			ACGIH		OSHA			IARC	NTP	OSHA
			TWA	STEL	PEL	STEL				
*	112-24-3	1,2-Ethanediamine, N,N'-bis(2-aminoethyl)- Triethylenetetramine  Common Name: Concentration 15.00 - 40.00 % by wt	NE	NE	NE	NE	NE	NR	NR	NR
*	26950-63-0	1,2-Ethanediamine, N,N'-bis(2-aminoethyl)-, polymer with methyloxirane Propoxylated Triethylenetetramine  Common Name: Concentration 60.00 - 100.00 % by wt	NE	NE	NE	NE	NE	NR	NR	NR

NE = Not Established NR = Not Reviewed \* = OSHA Hazardous Ingredient

**3. HAZARDS IDENTIFICATION**

**Emergency Overview:** Causes severe eye irritation and may cause eye burns. Can cause skin irritation and allergic skin reaction. Can be harmful if absorbed through skin and may be harmful if swallowed.

**Primary Route(s) of Entry:** Dermal; heated product may produce inhalable vapors.

#### **4. FIRST AID MEASURES**

**Ingestion:** Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Seek immediate medical attention.

**Skin:** Immediately wash with soap and water. Remove contaminated clothing and launder before reuse. Destroy contaminated shoes. Seek immediate medical attention.

**Inhalation:** Remove to fresh air. Seek immediate medical attention.

**Eyes:** Immediately flush eyes with water for at least 15 minutes. Seek immediate medical attention.

**Overexposure Effects:** Causes severe eye irritation and may cause eye burns. Can cause skin irritation and allergic skin reaction. Can be harmful if absorbed through skin and may be harmful if swallowed.

**Medical Conditions Aggravated by Exposure:** Skin and eye conditions.

**Additional Information:** Referral to a physician is recommended if there is any question about the seriousness of any injury.

#### **5. FIRE FIGHTING MEASURES**

<b>Flash Point:</b>	> 300°F (> 149 °C)
<b>Flash Point Method Used:</b>	PMCC
<b>Flammable Limits in Air (Lower - % by volume):</b>	Not established
<b>Flammable Limits in Air (Upper - % by volume):</b>	Not established

**Fire Fighting Extinguishing Media:** Carbon dioxide, dry chemical, foam, water.

**Fire Fighting Equipment:** Use self-contained breathing apparatus.

**Fire and Explosion Hazards:** Decomposition and combustion products may be toxic.

#### **6. ACCIDENTAL RELEASE MEASURES**

**Accidental Release Measures:** Remove spillage by absorbing in absorbent material.

#### **7. HANDLING AND STORAGE**

**Signal Word:** Danger!

**Precautions:** Causes severe eye irritation and may cause eye burns. Can cause skin irritation and allergic skin reaction. Can be harmful if absorbed through skin and may be harmful if swallowed. Do not get in eyes. Avoid breathing vapor or mist. Avoid contact with skin and clothing. Avoid tasting or swallowing. Keep container closed when not in use. Use with adequate ventilation. Wash thoroughly after handling.

**Other Handling Information:** Nuisance dust may be generated when sanding or sawing cured material.

#### **8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

Effective Date: 8/27/08

**Skin Protection:** Wear impermeable gloves.**Respiratory Protection:** Use NIOSH approved organic vapor cartridge respirator when vapor/mist exposure is likely.**Eye Protection:** Wear splash-proof chemical goggles.**Engineering Controls:** General mechanical and local exhaust in accordance with ACGIH recommendations.

## **9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Color:</b>	Light Amber
<b>Odor:</b>	Amine
<b>Physical State:</b>	Liquid
<b>Solubility in Water:</b>	Slight
<b>Vapor Pressure:</b>	< 1 mm Hg at 21°C (70 °F)
<b>Specific Gravity:</b>	1.02 (water = 1)
<b>Boiling Point:</b>	Not Determined
<b>Melting Point:</b>	Not Determined
<b>Evaporation Rate:</b>	Not Determined
<b>Density:</b>	1.02 g/cm <sup>3</sup> at 21°C (70 °F)
<b>Vapor Density:</b>	Not Determined
<b>pH:</b>	Not Determined
<b>Coefficient of water/oil:</b>	Not Determined

**Percent Volatile:** Not determined.

## **10. STABILITY AND REACTIVITY**

**Conditions to Avoid:** Excessive heat for prolonged periods of time.**Stability:** Stable.**Incompatibility:** Strong oxidizers, acids and bases.**Hazardous Decomposition Products:** Combustion may form toxic materials, such as carbon dioxide, carbon monoxide.**Hazardous Polymerization:** Will not occur.

## **11. TOXICOLOGICAL INFORMATION**

**Acute Oral Effects (LD50):** Component(s) are slightly toxic, 500 - 5000 mg/kg (rat).  
Triethylenetetramine= 2500 - 4340 mg/kg (rat)**Acute Dermal Toxicity (LD50):** Component(s) are toxic, 200 - 1000 mg/kg (rabbit).  
Triethylenetetramine= 550 - 800 mg/kg (rabbit)**Sensitization:** Possible in susceptible individuals.**Skin Irritation:** Irritant.

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Eye Irritation: Severe eye irritant.

**12. ECOLOGICAL INFORMATION****13. DISPOSAL CONSIDERATIONS**

**Waste Disposal Method:** Consult qualified local or corporate personnel for method that will comply with local, state and federal health and environmental regulations.

**14. TRANSPORT INFORMATION**

<b>DOT: Non-Bulk</b>	
<b>Proper Shipping Name:</b>	Not Regulated
<b>IATA: Non-Bulk</b>	
<b>Proper Shipping Name:</b>	Not Regulated
<b>IMDG: Non-Bulk</b>	
<b>Proper Shipping Name:</b>	Not Regulated
<b>TDG: Non-Bulk</b>	
<b>Proper Shipping Name:</b>	Not Regulated

**Motor Freight Classification** Resin compounds, N.O.I.

**15. REGULATORY INFORMATION****US Federal Regulations:**

**Occupational Safety and Health Act (OSHA):** This Material Safety Data Sheet (MSDS) has been prepared in compliance with the federal OSHA Hazard Communication Standard 29 CFR 1910.1200. This product is considered to be a hazardous chemical under that standard.

**Resource Conservation and Recovery Act (RCRA):** Not a hazardous waste under RCRA (40 CFR 261).

**SARA Title III: Section 313 Toxic Chemical List (TCL):** This product does not contain any chemicals for routine annual toxic chemical release reporting under Section 313 (40 CFR 372).

**TSCA Section 8(b) - Inventory Status:** All chemical components of this product are in compliance with TSCA inventory requirements.

**TSCA Section 12(b) - Export Notification:** This product does not contain any chemical(s) that are subject to a Section 12(b) export notification.

**International Regulations:**

**Canadian Inventory Status:** This product contains only chemicals that are currently listed on the Canadian Domestic Substance List.

**Canadian WHMIS:** This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations. D1B D2B

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**State Regulations:**

**California Proposition 65:** This product does not contain any chemicals currently on the California list of Known Carcinogens and Reproductive Toxins.

**Pennsylvania Right-to-Know:** The following is required composition information:

Chemical Name: 1,2-Ethanediamine, N,N'-bis(2-aminoethyl)-, polymer with methyloxirane

Common Name: Propoxylated Triethylenetetramine

CAS Number: 26950-63-0

Comment: Not on Pennsylvania Hazardous Substance List

Chemical Name: 1,2-Ethanediamine, N,N'-bis(2-aminoethyl)-

Common Name: Triethylenetetramine

CAS Number: 112-24-3

Comment: Hazardous Substance

**16. OTHER INFORMATION**

**MSDS No:** 5785  
**Approved By:** Dianne Blessing  
**Title:** EH&S Specialist

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