



Revision Number: 004.0

Issue date: 06/28/2019

## 1. PRODUCT AND COMPANY IDENTIFICATION

<b>Product name:</b>	<b>ALUMINUM PUTTY RESIN</b>	<b>IDH number:</b>	676724
<b>Product type/use:</b>	Epoxy resin	<b>Item number:</b>	10258000
<b>Restriction of Use:</b>	None identified	<b>Region:</b>	United States
<b>Company address:</b>	<b>Contact information:</b>		
Henkel Corporation	Telephone: +1 (860) 571-5100		
One Henkel Way	MEDICAL EMERGENCY Phone: Poison Control Center		
Rocky Hill, Connecticut 06067	1-877-671-4608 (toll free) or 1-303-592-1711		
	TRANSPORT EMERGENCY Phone: CHEMTREC		
	1-800-424-9300 (toll free) or 1-703-527-3887		
	Internet: www.henkelna.com		

## 2. HAZARDS IDENTIFICATION

### EMERGENCY OVERVIEW

**WARNING:** CAUSES SKIN IRRITATION.  
MAY CAUSE AN ALLERGIC SKIN REACTION.  
CAUSES SERIOUS EYE IRRITATION.

HAZARD CLASS	HAZARD CATEGORY
SKIN IRRITATION	2
EYE IRRITATION	2A
SKIN SENSITIZATION	1

### PICTOGRAM(S)



### Precautionary Statements

<b>Prevention:</b>	Avoid breathing vapors, mist, or spray. Wash affected area thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves, eye protection, and face protection.
<b>Response:</b>	IF ON SKIN: Wash with plenty of water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If skin irritation or rash occurs: Get medical attention. If eye irritation persists: Get medical attention. Take off contaminated clothing.
<b>Storage:</b>	Not prescribed
<b>Disposal:</b>	Dispose of contents and/or container according to Federal, State/Provincial and local governmental regulations.

Classification complies with OSHA Hazard Communication Standard (29 CFR 1910.1200) and is consistent with the provisions of the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

See Section 11 for additional toxicological information.

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Component(s)	CAS Number	Percentage*
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Aluminum	7429-90-5	30 - 60
Epichlorohydrin-4,4'-isopropylidene diphenol resin	25068-38-6	30 - 60
Calcium carbonate	471-34-1	5 - 10
Treated fumed silica	67762-90-7	1 - 5
2,2'-(methylenebis(p-phenyleneoxymethylene))bisoxirane	2095-03-6	0.1 - 1

\* Exact percentages may vary or are trade secret. Concentration range is provided to assist users in providing appropriate protections.

## 4. FIRST AID MEASURES

<b>Inhalation:</b>	Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. If symptoms develop and persist, get medical attention.
<b>Skin contact:</b>	Immediately flush skin with plenty of water (using soap, if available). Remove contaminated clothing and footwear. If symptoms develop and persist, get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.
<b>Eye contact:</b>	Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.
<b>Ingestion:</b>	DO NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention.
<b>Symptoms:</b>	See Section 11.

## 5. FIRE FIGHTING MEASURES

<b>Extinguishing media:</b>	Water spray (fog), foam, dry chemical or carbon dioxide.
<b>Special firefighting procedures:</b>	Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear.
<b>Unusual fire or explosion hazards:</b>	Closed containers may rupture (due to build up of pressure) when exposed to extreme heat. In case of fire, keep containers cool with water spray.
<b>Hazardous combustion products:</b>	Oxides of carbon. Acids. Aldehydes. Phenolics. Irritating vapors.

## 6. ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

<b>Environmental precautions:</b>	Do not allow product to enter sewer or waterways.
<b>Clean-up methods:</b>	Ensure adequate ventilation. Wear appropriate personal protective equipment. Refer to Section 8 "Exposure Controls / Personal Protection" prior to clean up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Scrape up spilled material and place in a closed container for disposal.

## 7. HANDLING AND STORAGE

<b>Handling:</b>	Prevent contact with eyes, skin and clothing. Do not breathe vapor and mist. Wash thoroughly after handling. Use only with adequate ventilation. Keep container closed.
<b>Storage:</b>	Keep container tightly closed and in a cool, well-ventilated place away from incompatible materials. Keep away from heat, spark and flame. Protect from direct sunlight.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.

Hazardous Component(s)	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
Aluminum	1 mg/m3 TWA Respirable fraction.	15 mg/m3 PEL (as Al) Total dust. 5 mg/m3 PEL (as Al) Respirable fraction. 15 MPPCF TWA Respirable fraction. 50 MPPCF TWA Total dust. 5 mg/m3 TWA Respirable fraction. 15 mg/m3 TWA Total dust.	None	None
Epichlorohydrin-4,4'-isopropylidene diphenol resin	None	None	None	None
Calcium carbonate	None	5 mg/m3 PEL Respirable fraction. 15 mg/m3 PEL Total dust.	None	None
Treated fumed silica	10 mg/m3 TWA Inhalable dust. 3 mg/m3 TWA Respirable fraction.	15 mg/m3 TWA Total dust. 5 mg/m3 TWA Respirable fraction.	None	None
2,2'-(methylenebis(p-phenyleneoxymethylene))bisoxirane	None	None	None	None

<b>Engineering controls:</b>	Use local ventilation if general ventilation is insufficient to maintain vapor concentration below established exposure limits.
<b>Respiratory protection:</b>	Use NIOSH approved respirator if there is potential to exceed exposure limit(s).
<b>Eye/face protection:</b>	Safety goggles or safety glasses with side shields. Full face protection should be used if the potential for splashing or spraying of product exists.
<b>Skin protection:</b>	Use chemical resistant, impermeable clothing including gloves and either an apron or body suit to prevent skin contact.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state:</b>	Paste
<b>Color:</b>	Gray
<b>Odor:</b>	Slight
<b>Odor threshold:</b>	Not available.
<b>pH:</b>	Not applicable
<b>Vapor pressure:</b>	Not available.
<b>Boiling point/range:</b>	Not available.
<b>Melting point/ range:</b>	Not available.
<b>Specific gravity:</b>	1.5634

<b>Vapor density:</b>	Heavier than air.
<b>Flash point:</b>	149 °C (300.2 °F) Tagliabue closed cup
<b>Flammable/Explosive limits - lower:</b>	Not available.
<b>Flammable/Explosive limits - upper:</b>	Not available.
<b>Autoignition temperature:</b>	Not available.
<b>Flammability:</b>	Not applicable
<b>Evaporation rate:</b>	Not available.
<b>Solubility in water:</b>	Insoluble
<b>Partition coefficient (n-octanol/water):</b>	Not available.
<b>VOC content:</b>	< 1.0 %; < 10 g/l (value for resin and hardener together) (estimated)
<b>Viscosity:</b>	Not available.
<b>Decomposition temperature:</b>	Not available.

## 10. STABILITY AND REACTIVITY

<b>Stability:</b>	Stable under normal conditions of storage and use.
<b>Hazardous reactions:</b>	None under normal processing.
<b>Hazardous decomposition products:</b>	Oxides of carbon. Acids. Phenolics. Aldehydes. Toxic fumes. Irritating vapors.
<b>Incompatible materials:</b>	Strong acids. Strong oxidizing agents. Acids. Bases. Strong Lewis acids. Strong mineral acids. Amines. Mercaptans.
<b>Reactivity:</b>	Not available.
<b>Conditions to avoid:</b>	Keep away from heat, ignition sources and incompatible materials. Protect from direct sunlight.

## 11. TOXICOLOGICAL INFORMATION

**Relevant routes of exposure:** Skin, Inhalation, Eyes

### Potential Health Effects/Symptoms

<b>Inhalation:</b>	Inhalation of vapors or mists of the product may be irritating to the respiratory system.
<b>Skin contact:</b>	Causes skin irritation. May cause allergic skin reaction.
<b>Eye contact:</b>	Causes serious eye irritation.
<b>Ingestion:</b>	Not expected under normal conditions of use.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
Aluminum	None	Central nervous system, Irritant, Lung
Epichlorohydrin-4,4'-isopropylidene diphenol resin	None	Allergen, Irritant
Calcium carbonate	Oral LD50 (Rat) = 6,450 mg/kg Oral LD50 (Mouse) = 6,450 mg/kg	Nuisance dust
Treated fumed silica	None	Irritant
2,2'-(methylenebis(p-phenyleneoxymethylene))bisoxirane	None	No Data

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Aluminum	No	No	No
Epichlorohydrin-4,4'-isopropylidene diphenol resin	No	No	No
Calcium carbonate	No	No	No
Treated fumed silica	No	No	No
2,2'-(methylenebis(p-phenyleneoxymethylene))bisoxirane	No	No	No

## 12. ECOLOGICAL INFORMATION

Ecological information: Not available.

## 13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal: Follow all local, state, federal and provincial regulations for disposal.

Hazardous waste number: Not a RCRA hazardous waste.

## 14. TRANSPORT INFORMATION

The transport information provided in this section only applies to the material/formulation itself, and is not specific to any package/configuration.

### U.S. Department of Transportation Ground (49 CFR)

Proper shipping name: Not regulated  
Hazard class or division: None  
Identification number: None  
Packing group: None

### International Air Transportation (ICAO/IATA)

Proper shipping name: Environmentally hazardous substance, liquid, n.o.s. (Bisphenol-A Epichlorhydrin resin)  
Hazard class or division: 9  
Identification number: UN 3082  
Packing group: III

### Water Transportation (IMO/IMDG)

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Bisphenol-A Epichlorhydrin resin)  
Hazard class or division: 9  
Identification number: UN 3082  
Packing group: III  
Marine pollutant: Bisphenol-A Epichlorhydrin resin

## 15. REGULATORY INFORMATION

### United States Regulatory Information

TSCA 8 (b) Inventory Status: All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory.

TSCA 12 (b) Export Notification: None above reporting de minimis

CERCLA/SARA Section 302 EHS: None above reporting de minimis.

CERCLA/SARA Section 311/312: Immediate Health, Delayed Health

CERCLA/SARA Section 313: This product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40 CFR 372). Aluminum (CAS# 7429-90-5).

California Proposition 65: This product contains a chemical known in the State of California to cause cancer. This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

### Canada Regulatory Information

CEPA DSL/NDL Status: All components are listed on or are exempt from listing on the Canadian Domestic Substances List.

## 16. OTHER INFORMATION

This safety data sheet contains changes from the previous version in sections: 2, 11

**Prepared by:** Product Safety and Regulatory Affairs

**Issue date:** 06/28/2019

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## 1. PRODUCT AND COMPANY IDENTIFICATION

<b>Product name:</b>	<b>ALUMINUM PUTTY HARDENER</b>	<b>IDH number:</b>	677309
<b>Product type:</b>	Epoxy Hardener	<b>Item number:</b>	318000
<b>Restriction of Use:</b>	None identified	<b>Region:</b>	United States
<b>Company address:</b>	<b>Contact information:</b>		
Henkel Corporation	Telephone: +1 (860) 571-5100		
One Henkel Way	MEDICAL EMERGENCY Phone: Poison Control Center		
Rocky Hill, Connecticut 06067	1-877-671-4608 (toll free) or 1-303-592-1711		
	TRANSPORT EMERGENCY Phone: CHEMTREC		
	1-800-424-9300 (toll free) or 1-703-527-3887		
	Internet: www.henkelna.com		

## 2. HAZARDS IDENTIFICATION

### EMERGENCY OVERVIEW

**DANGER:** HARMFUL IF SWALLOWED OR IN CONTACT WITH SKIN.  
CAUSES SEVERE SKIN BURNS AND EYE DAMAGE.  
MAY CAUSE AN ALLERGIC SKIN REACTION.  
MAY CAUSE ALLERGY OR ASTHMA SYMPTOMS OR BREATHING  
DIFFICULTIES IF INHALED.

HAZARD CLASS	HAZARD CATEGORY
ACUTE TOXICITY ORAL	4
ACUTE TOXICITY DERMAL	4
SKIN CORROSION	1B
SERIOUS EYE DAMAGE	1
RESPIRATORY SENSITIZATION	1
SKIN SENSITIZATION	1

### PICTOGRAM(S)



### Precautionary Statements

<b>Prevention:</b>	Avoid breathing vapors, mist, or spray. Wash affected area thoroughly after handling. Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves, clothing, eye and face protection. In case of inadequate ventilation wear respiratory protection.
<b>Response:</b>	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or physician. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If skin irritation or rash occurs: Get medical attention. If experiencing respiratory symptoms: Call a poison center or physician. Wash contaminated clothing before reuse.
<b>Storage:</b>	Store locked up.
<b>Disposal:</b>	Dispose of contents and/or container according to Federal, State/Provincial and local governmental regulations.

Classification complies with OSHA Hazard Communication Standard (29 CFR 1910.1200) and is consistent with the provisions of the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

See Section 11 for additional toxicological information.

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Component(s)	CAS Number	Percentage*
C18 Fatty acid dimer, tall oil fatty acid, triethylenetetramine polymer	68082-29-1	30 - 40
Triethylenetetramine	112-24-3	20 - 30
Aluminum	7429-90-5	5 - 10
Silicon dioxide	7631-86-9	5 - 10
N-Aminoethylpiperazine	140-31-8	5 - 10
4,4'-Isopropylidenediphenol	80-05-7	5 - 10
Glycerypoly(oxypropylene)triamine	64852-22-8	1 - 5
Nonylphenol	25154-52-3	1 - 5
Benzyl alcohol	100-51-6	0.1 - 1
Benzyl dimethylamine	103-83-3	0.1 - 1

\* Exact percentages may vary or are trade secret. Concentration range is provided to assist users in providing appropriate protections.

### 4. FIRST AID MEASURES

<b>Inhalation:</b>	Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
<b>Skin contact:</b>	Immediately flush skin with plenty of water (using soap, if available). Remove contaminated clothing and footwear. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.
<b>Eye contact:</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.
<b>Ingestion:</b>	DO NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention.
<b>Symptoms:</b>	See Section 11.

### 5. FIRE FIGHTING MEASURES

<b>Extinguishing media:</b>	Water spray (fog), foam, dry chemical or carbon dioxide.
<b>Special firefighting procedures:</b>	Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear. In case of fire, keep containers cool with water spray.
<b>Unusual fire or explosion hazards:</b>	Closed containers may rupture (due to build up of pressure) when exposed to extreme heat.
<b>Hazardous combustion products:</b>	Oxides of carbon. Oxides of nitrogen. Irritating organic fragments. Nitric acid. Ammonia. Aldehydes. Ketones. Phenolics.

### 6. ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

<b>Environmental precautions:</b>	Do not allow product to enter sewer or waterways.
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**Clean-up methods:**

Ensure adequate ventilation. Wear appropriate personal protective equipment. Refer to Section 8 "Exposure Controls / Personal Protection" prior to clean up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Scrape up spilled material and place in a closed container for disposal.

## 7. HANDLING AND STORAGE

**Handling:**

Use only with adequate ventilation. Prevent contact with eyes, skin and clothing. Do not breathe vapor and mist. Wash thoroughly after handling. Keep container closed.

**Storage:**

Keep container tightly closed and in a cool, well-ventilated place away from incompatible materials. Store away from heat, sparks, flames, or other sources of ignition.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.

Hazardous Component(s)	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
C18 Fatty acid dimer, tall oil fatty acid, triethylenetetramine polymer	None	None	None	None
Triethylenetetramine	None	None	1 ppm (6 mg/m <sup>3</sup> ) TWA (SKIN)	None
Aluminum	1 mg/m <sup>3</sup> TWA Respirable fraction.	15 mg/m <sup>3</sup> PEL (as Al) Total dust. 5 mg/m <sup>3</sup> PEL (as Al) Respirable fraction. 15 MPPCF TWA Respirable fraction. 50 MPPCF TWA Total dust. 5 mg/m <sup>3</sup> TWA Respirable fraction. 15 mg/m <sup>3</sup> TWA Total dust.	None	None
Silicon dioxide	6 mg/m <sup>3</sup> TWA	20 MPPCF TWA 0.8 mg/m <sup>3</sup> TWA	None	3 mg/m <sup>3</sup> TWA Respirable fraction.
N-Aminoethylpiperazine	None	None	None	None
4,4'-Isopropylidenediphenol	None	None	None	None
Glycerylpoly(oxypropylene)triamine	None	None	None	None
Nonylphenol	None	None	None	None
Benzyl alcohol	None	None	10 ppm (44.20 mg/m <sup>3</sup> ) TWA	None
Benzyl dimethylamine	None	None	None	None

**Engineering controls:**

Use local ventilation if general ventilation is insufficient to maintain vapor concentration below established exposure limits.

**Respiratory protection:**

Use a NIOSH approved air-purifying respirator if the potential to exceed established exposure limits exists.

**Eye/face protection:**

Safety goggles or safety glasses with side shields. Full face protection should be used if the potential for splashing or spraying of product exists.

**Skin protection:**

Use chemical resistant, impermeable clothing including gloves and either an apron or body suit to prevent skin contact.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Paste
Color:	Silver
Odor:	Slight, Ammoniacal
Odor threshold:	Not available.
pH:	Not applicable
Vapor pressure:	Not available.
Boiling point/range:	Not available.
Melting point/ range:	Not available.
Specific gravity:	1.5
Vapor density:	Not available.
Flash point:	> 93.4 °C (> 200.12 °F) ; Estimated
Flammable/Explosive limits - lower:	Not available.
Flammable/Explosive limits - upper:	Not available.
Autoignition temperature:	Not available.
Flammability:	Not applicable
Evaporation rate:	Not available.
Solubility in water:	Partially soluble
Partition coefficient (n-octanol/water):	Not available.
VOC content:	< 1.0 %; < 10 g/l (value for resin and hardener together) (estimated)
Viscosity:	Not available.
Decomposition temperature:	Not available.

## 10. STABILITY AND REACTIVITY

Stability:	Stable under normal conditions of storage and use.
Hazardous reactions:	Polymerization is a highly exothermic reaction and may generate sufficient heat to cause thermal decomposition and/or rupture containers.
Hazardous decomposition products:	Oxides of carbon. Oxides of nitrogen. Nitric acid. Ammonia. Aldehydes. Ketones. Phenolics. Toxic fumes. Irritating vapors.
Incompatible materials:	Strong acids and strong bases. Strong oxidizing agents. Amines. Strong mineral acids. Calcium hypochlorite. Sodium hypochlorite. Copper. Aluminum. Zinc. Nitrous acid and other nitrosating agents.
Reactivity:	Not available.
Conditions to avoid:	Keep away from heat, ignition sources and incompatible materials.

## 11. TOXICOLOGICAL INFORMATION

Relevant routes of exposure:	Skin, Inhalation, Eyes, Ingestion
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## Potential Health Effects/Symptoms

<b>Inhalation:</b>	May cause allergic respiratory reaction. 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). May cause irritation to nose and throat. Shortness of breath. Coughing.
<b>Skin contact:</b>	Harmful in contact with skin. Corrosive to skin. Causes skin burns. May cause allergic skin reaction. Rash. Redness. Pain and discomfort.
<b>Eye contact:</b>	Causes serious eye damage. Causes eye burns. Blurred vision. Excess tearing. Pain and discomfort. Tissue damage. Corneal edema may give appearance of "blue haze" or "fog" around lights. Redness.
<b>Ingestion:</b>	Harmful if swallowed. May cause burns of mouth and throat if swallowed. May cause an aspiration hazard if swallowed. Aspirated material can enter the lungs and result in pneumonitis.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
C18 Fatty acid dimer, tall oil fatty acid, triethylenetetramine polymer	None	No Records
Triethylenetetramine	None	Allergen, Corrosive, Developmental, Irritant, Mutagen
Aluminum	None	Central nervous system, Irritant, Lung
Silicon dioxide	Oral LD50 (Rat) = > 22,500 mg/kg Oral LD50 (Mouse) = > 15,000 mg/kg	Nuisance dust
N-Aminoethylpiperazine	None	Irritant, Corrosive, Allergen
4,4'-Isopropylidenediphenol	Oral LD50 (Rat) = 4,100 mg/kg Oral LD50 (Rat) = 3,300 mg/kg Oral LD50 (Mouse) = 5,280 mg/kg Oral LD50 (Mouse) = 2,500 mg/kg Oral LD50 (Mouse) = 4,100 mg/kg	Allergen, Blood, Irritant, Kidney, Reproductive, Spleen
Glycerylpoly(oxypropylene)triamine	None	No Records
Nonylphenol	Oral LD50 (Rat) = 1,600 mg/kg Dermal LD50 (Rabbit) = 2,140 mg/kg	Allergen, Corrosive, Irritant, Kidney
Benzyl alcohol	Oral LD50 (Rabbit) = 1,940 mg/kg Oral LD50 (Rat) = 1,230 - 3,100 mg/kg Oral LD50 (Mouse) = 1,580 mg/kg Oral LD50 (Rat) = 3,100 mg/kg Dermal LD50 (Rabbit) = 2,000 mg/kg	Allergen, Central nervous system, Corrosive, Irritant
Benzyl dimethylamine	None	Irritant, Corrosive, Allergen, Respiratory

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
C18 Fatty acid dimer, tall oil fatty acid, triethylenetetramine polymer	No	No	No
Triethylenetetramine	No	No	No
Aluminum	No	No	No
Silicon dioxide	No	No	No
N-Aminoethylpiperazine	No	No	No
4,4'-Isopropylidenediphenol	No	No	No
Glycerylpoly(oxypropylene)triamine	No	No	No
Nonylphenol	No	No	No
Benzyl alcohol	No	No	No
Benzyl dimethylamine	No	No	No

## 12. ECOLOGICAL INFORMATION

**Ecological information:** Not available.

### 13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

<b>Recommended method of disposal:</b>	Follow all local, state, federal and provincial regulations for disposal.
<b>Hazardous waste number:</b>	It is the responsibility of the user to determine if an item is hazardous as defined in the Resource Conservation and Recovery Act (RCRA) at the time of disposal. Product uses, transformations, mixtures, processes, etc., may render the resulting material hazardous, under the criteria of Ignitability, corrosivity, reactivity and toxicity characteristics of the Toxicity Characteristics Leaching Procedure (TCLP) 40 CFR 261.20-24.

### 14. TRANSPORT INFORMATION

The transport information provided in this section only applies to the material/formulation itself, and is not specific to any package/configuration.

#### U.S. Department of Transportation Ground (49 CFR)

<b>Proper shipping name:</b>	Amines, liquid, corrosive, n.o.s. (Aminoethylpiperazine, Triethylenetetramine)
<b>Hazard class or division:</b>	8
<b>Identification number:</b>	UN 2735
<b>Packing group:</b>	II

#### International Air Transportation (ICAO/IATA)

<b>Proper shipping name:</b>	Amines, liquid, corrosive, n.o.s. (Aminoethylpiperazine, Triethylenetetramine)
<b>Hazard class or division:</b>	8
<b>Identification number:</b>	UN 2735
<b>Packing group:</b>	II

#### Water Transportation (IMO/IMDG)

<b>Proper shipping name:</b>	AMINES, LIQUID, CORROSIVE, N.O.S. (Aminoethylpiperazine, Triethylenetetramine)
<b>Hazard class or division:</b>	8
<b>Identification number:</b>	UN 2735
<b>Packing group:</b>	II

### 15. REGULATORY INFORMATION

#### United States Regulatory Information

<b>TSCA 8 (b) Inventory Status:</b>	All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory.
<b>TSCA 12 (b) Export Notification:</b>	Alkyl phenol (CAS# 25154-52-3).
<b>CERCLA/SARA Section 302 EHS:</b>	None above reporting de minimis.
<b>CERCLA/SARA Section 311/312:</b>	Immediate Health, Delayed Health
<b>CERCLA/SARA Section 313:</b>	This product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40 CFR 372). Aluminum (CAS# 7429-90-5). 4,4'-Isopropylidenediphenol (CAS# 80-05-7). Nonylphenol (CAS# 25154-52-3).
<b>California Proposition 65:</b>	This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

#### Canada Regulatory Information

<b>CEPA DSL/NDL Status:</b>	Contains one or more components listed on the Non-Domestic Substances List. All other components are listed on or are exempt from listing on the Domestic Substances List. Components listed on the NDSL must be tracked by all Canadian Importers of Record as required by Environment Canada. They may be imported into Canada in limited quantities. Please contact Regulatory Affairs for additional details.
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## 16. OTHER INFORMATION

**This safety data sheet contains changes from the previous version in sections: 15**

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