

Revision Number: 008.0

Issue date: 01/18/2023

1. PRODUCT AND COMPANY IDENTIFICATION

Product name:

Product type/use: Epoxy i Restriction of Use: None ic Company address: Henkel Corporation One Henkel Way Rocky Hill, Connecticut 06067

LOCTITE EA 445 RESIN known as Fast IDH number: Cure Epoxy RESIN Epoxy resin Item number: None identified Region: Contact infor Telephone: +'

 IDH number:
 701930

 Item number:
 21425_150345

 Region:
 United States

 Contact information:
 Telephone: +1 (860) 571-5100

 MEDICAL EMERGENCY Phone: Poison Control Center
 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
 Telephone: Poison

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW		
DANGER:	CAUSES SKIN IRRITATION.	
	MAY CAUSE AN ALLERGIC SKIN REACTION.	
	CAUSES SERIOUS EYE IRRITATION.	
	MAY CAUSE CANCER.	
	SUSPECTED OF DAMAGING FERTILITY OR THE UNBORN CHILD.	

HAZARD CLASS	HAZARD CATEGORY
SKIN IRRITATION	2
EYE IRRITATION	2A
SKIN SENSITIZATION	1
CARCINOGENICITY	1B
REPRODUCTIVE TOXICITY	2



Precautionary Statements

Prevention:	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. 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, clothing, eye and face protection.
Response:	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 exposed or concerned: Get medical attention. If skin irritation or rash occurs: Get medical attention. If eye irritation persists: Get medical attention. Take off contaminated clothing.
Storage:	Store locked up.
Disposal:	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*		
		 		 _	

IDH number: 701930

Product name: LOCTITE EA 445 RESIN known as Fast Cure Epoxy RESIN Page 1 of 6

Epichlorohydrin-4,4'-isopropylidene diphenol resin	25068-38-6	30 - 60
Aluminium hydroxide	21645-51-2	30 - 60
Titanium dioxide	13463-67-7	5 - 10
Bisphenol A, polymer with formaldehyde and epichlorohydrin	28906-96-9	1 - 5
Distillates (petroleum), heavy thermal cracked	64741-81-7	0.1 - 1
Residues (petroleum), thermal cracked	64741-80-6	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				
Inhalation:	Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention.			
Skin contact:	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.			
Eye contact:	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.			
Ingestion:	DO NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention.			
Symptoms:	See Section 11.			
5.	FIRE FIGHTING MEASURES			
Extinguishing media:	Water spray (fog), foam, dry chemical or carbon dioxide.			
Special firefighting procedures:	Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear. In case of fire, keep containers cool with water spray.			

 Unusual fire or explosion hazards:
 Closed containers may rupture (due to build up of pressure) when exposed to extreme heat.

 Hazardous combustion products:
 Oxides of carbon. Phenolics. Halogenated compounds. Acids. Aldehydes. 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.

Environmental precautions:

Clean-up methods:

Do not allow product to enter sewer or waterways.

Remove all sources of ignition. Evacuate and ventilate spill area; dike spill to prevent entry into water system; wear full protective equipment during cleanup. 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:	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. Refer to Section 8.
Storage:	Keep container tightly closed and in a cool, well-ventilated place away from incompatible materials. Keep away from heat, spark and flame. Store in original container until ready to use.

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
Epichlorohydrin-4,4'-isopropylidene diphenol resin	None	None	None	None
Aluminium hydroxide	1 mg/m3 TWA Respirable fraction. 10 mg/m3 TWA (as Al) Total dust. 3 mg/m3 TWA Respirable particles. 10 mg/m3 TWA Inhalable particles.	15 mg/m3 TWA (as Al) Total dust. 5 mg/m3 TWA (as Al) Respirable fraction. 15 MPPCF TWA Respirable fraction. 15 mg/m3 TWA Total dust. 5 mg/m3 TWA Respirable fraction. 50 MPPCF TWA Total dust.	None	None
Titanium dioxide	0.2 mg/m3 TWA Respirable nanoscale particles 2.5 mg/m3 TWA Respirable finescale particles	15 mg/m3 PEL Total dust. 15 MPPCF TWA Respirable fraction. 15 mg/m3 TWA Total dust. 50 MPPCF TWA Total dust. 5 mg/m3 TWA Respirable fraction.	None	None
Bisphenol A, polymer with formaldehyde and epichlorohydrin	None	None	None	None
Distillates (petroleum), heavy thermal cracked	None	None	None	None
Residues (petroleum), thermal cracked	None	None	None	None

Engineering controls:

Respiratory protection:

Eye/face protection:

Provide adequate local exhaust ventilation to maintain worker exposure below exposure limits.

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

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

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: Color: Odor: Odor threshold: pH: Vapor pressure: Boiling point/range: Melting point/ range: Specific gravity: Vapor density: Flash point: Flammable/Explosive limits - lower: Flammable/Explosive limits - upper: Autoignition temperature: Flammability: Evaporation rate: Solubility in water: Partition coefficient (n-octanol/water): **VOC content:**

Viscosity: IDH number: 701930

Paste White Mild Not available. Not applicable Negligible > 149 °C (> 300.2 °F) Not available. 1.68 Not available. > 93 °C (> 199.4 °F) Tagliabue closed cup Not available. Not available. Not available. Not applicable Not available. Slight Not available. 0.47 %; 7.9 g/l 0.04 % (value for resin and hardener together) Not available. Product name: LOCTITE EA 445 RESIN known as Fast Cure Epoxy RESIN Page 3 of 6

Decomposition temperature:	Not available.	
	10. STABILITY AND REACTIVITY	
Stability:	Stable under normal conditions of storage and use.	
Hazardous reactions:	Reaction with some curing agents may produce an exothermic reaction which in large masses could cause runaway polymerization.	
Hazardous decomposition products:	Oxides of carbon. Phenolics. Halogenated compounds. Acids. Aldehydes. Irritating vapors.	
Incompatible materials:	Strong bases. Strong oxidizing agents. Strong acids. Amines.	
Reactivity:	Not available.	
Conditions to avoid:	Keep away from heat, ignition sources and incompatible materials. Note: Heating the epoxy resin in this product above 148.9 °C (300 °F) in the presence of air may cause slow oxidative decomposition. Above 260 °C (500 °F) polymerization of the epoxy resin may occur. Aliphatic polyamines can produce exothermic reactions with epoxy resins which in large masses can cause runaway polymerization and charring of the reactants. Fumes and vapors from these thermal and chemical decompositions vary widely in composition and toxicity. Do not breathe fumes.	
11. TOXICOLOGICAL INFORMATION		

Relevant routes of exposure:

Skin, Inhalation, Eyes, Ingestion

Potential Health Effects/Symptoms

Inhalation:	May cause respir
Skin contact:	Causes skin irrita
Eye contact:	Causes serious e
Ingestion:	May cause gastro

May cause respiratory tract irritation. Causes skin irritation. May cause allergic skin reaction. Causes serious eye irritation. May cause gastrointestinal tract irritation if swallowed.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects	
Epichlorohydrin-4,4'-isopropylidene diphenol resin	None	Allergen, Irritant	
Aluminium hydroxide	Oral LD50 (Rat) = > 5,000 mg/kg Inhalation LC50 (Rat, 4 h) = > 0.888 mg/l Inhalation LC50 (Rat, 4 h) = > 2.3 mg/l	Irritant, Lung, Respiratory	
Titanium dioxide	Inhalation LC50 (Rat, 4 h) = > 6.82 mg/l Inhalation LC50 (Rat, 4 h) = > 2.28 mg/l Inhalation LC50 (Rat, 4 h) = > 3.56 mg/l	Irritant, Respiratory, Some evidence of carcinogenicity	
Bisphenol A, polymer with formaldehyde and epichlorohydrin	None	Irritant, Allergen	
Distillates (petroleum), heavy thermal cracked	Inhalation LC50 (Rat, 4 h) = $4,100 \text{ mg/m3}$ Inhalation LC50 (Rat, 4 h) = $> 1,450 \text{ mg/m3}$ Inhalation LC50 (Rat, 4 h) = $> 3,600 \text{ mg/m3}$ Inhalation LC50 (Rat, 4 h) = $4,100 \text{ mg/m3}$ Inhalation LC50 (Rat, 4 h) = $4,500 \text{ mg/m3}$ Inhalation LC50 (Rat, 4 h) = 320 mg/m3	No Target Organs	
Residues (petroleum), thermal cracked	Inhalation LC50 (Rat, 4 h) = $4,500 \text{ mg/m3}$ Inhalation LC50 (Rat, 4 h) = $> 3,600 \text{ mg/m3}$ Inhalation LC50 (Rat, 4 h) = $> 320 \text{ mg/m3}$ Inhalation LC50 (Rat, 4 h) = $4,100 \text{ mg/m3}$ Inhalation LC50 (Rat, 4 h) = $4,100 \text{ mg/m3}$ Inhalation LC50 (Rat, 4 h) = $1,450 \text{ mg/m3}$	No Data	

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Epichlorohydrin-4,4'-isopropylidene diphenol resin	No	No	No
Aluminium hydroxide	No	No	No
Titanium dioxide	No	Group 2B	No
Bisphenol A, polymer with formaldehyde and epichlorohydrin	No	No	No
Distillates (petroleum), heavy thermal cracked	No	Group 2B	No
Residues (petroleum), thermal cracked	No	Group 2B	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.

14. TRANSPORT INFORMATION

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

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

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

International Air Transportation (ICAO/IATA) Proper shipping name: Hazard class or division: Identification number: Packing group:	Environmentally hazardous substance, liquid, n.o.s. (Epoxy resin) 9 UN 3082 III
Water Transportation (IMO/IMDG) Proper shipping name: Hazard class or division: Identification number: Packing group: Marine pollutant:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Epoxy resin) 9 UN 3082 III Epoxy resin

15. REGULATORY INFORMATION

United States Regulatory Information

TSCA 8 (b) Inventory Status:	All components are listed as active or are exempt from listing on the Toxic Substances Control Act (TSCA) inventory.
TSCA 12 (b) Export Notification:	None above reporting de minimis
CERCLA/SARA Section 302 EHS: CERCLA/SARA Section 311/312: CERCLA/SARA Section 313:	None above reporting de minimis. Immediate Health, Delayed Health None above reporting de minimis.
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/NDSL 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: 2,3,5,8,10,11,13,15

Prepared by: Product Safety and Regulatory Affairs

Issue date: 01/18/2023

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Revision Number: 009.0

1. PRODUCT AND COMPANY IDENTIFICATION

Product name:

Product type/use: Epoxy | Restriction of Use: None ic Company address: Henkel Corporation One Henkel Way Rocky Hill, Connecticut 06067

LOCTITE EA 445 HARDENER known as Fast Cure Epoxy HARDENER Epoxy Hardener None identified IDH number: 701941 Item number: 21425_150445 Region: United States Contact information: Telephone: +1 (860) 571-5100 MEDICAL EMERGENCY Phone: Poison Control Center 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:	CAUSES SKIN IRRITATION.
	CAUSES SERIOUS EYE DAMAGE.
	MAY CAUSE CANCER.
	SUSPECTED OF DAMAGING FERTILITY OR THE UNBORN CHILD.
	CAUSES DAMAGE TO ORGANS THROUGH PROLONGED OR REPEATED
	EXPOSURE.
	MAY CAUSE DAMAGE TO ORGANS THROUGH PROLONGED OR
	REPEATED EXPOSURE.

HAZARD CLASS	HAZARD CATEGORY
SKIN IRRITATION	2
SERIOUS EYE DAMAGE	1
CARCINOGENICITY	1B
REPRODUCTIVE TOXICITY	2
SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE	1
SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE	2

PICTOGRAM(S)	

Precautionary Statements

Prevention:	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe vapors, mist, or spray. Wash affected area thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves, clothing, eve and face protection.
Response:	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 exposed or concerned: Get medical attention. If skin irritation occurs: Get medical attention. Take off contaminated clothing.
Storage:	Store locked up.
Disposal:	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*	
Aluminium hydroxide	21645-51-2	30 - 60	
2,4,6-tris(dimethylaminomethyl)phenol	90-72-2	5 - 10	
Residues (petroleum), thermal cracked	64741-80-6	1 - 5	
Distillates (petroleum), heavy thermal cracked	64741-81-7	1 - 5	
Styrene	100-42-5	1 - 5	
Silica, amorphous, fumed, crystfree	112945-52-5	1 - 5	
Ethylene glycol	107-21-1	1 - 5	

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

4. FIRST AID MEASURES		
Inhalation:	Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention.	
Skin contact:	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.	
Eye contact:	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.	
Ingestion:	DO NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention.	
Symptoms:	See Section 11.	
5. FIRE FIGHTING MEASURES		
Extinguishing media:	Water spray (fog), foam, dry chemical or carbon dioxide.	
Special firefighting procedures:	Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear. In case of fire, keep containers cool with water spray.	
Unusual fire or explosion hazards:	Closed containers may rupture (due to build up of pressure) when exposed to extreme heat.	

Hazardous combustion products:

Oxides of carbon. Oxides of nitrogen. Oxides of sulfur. Alcohols. Aldehydes. Ammonia. Ethers. Hydrogen sulfide. Nitric acid. Toxic fumes. 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.

Environmental precautions:	Do not allow product to enter sewer or waterways.
Clean-up methods:	Remove all sources of ignition. Evacuate and ventilate spill area; or prevent entry into water system; wear full protective equipment du
	up. Refer to Section 8 "Exposure Controls / Personal Protection" r

prevent entry into water system; wear full protective equipment during cleanup. 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.

dike spill to

7. HANDLING AND STORAGE

Handling:

Prevent contact with eyes, skin and clothing. Do not breathe vapor and mist. Wash thoroughly after handling. Keep container closed. Use only with adequate ventilation. Refer to Section 8.

Storage:

Keep container tightly closed and in a cool, well-ventilated place away from incompatible materials. Keep away from heat, spark and flame. Store in original container until ready to use.

EXPOSURE CONTROLS / PERSONAL PROTECTION 8.

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
Aluminium hydroxide	1 mg/m3 TWA Respirable fraction. 10 mg/m3 TWA (as AI) Total dust. 3 mg/m3 TWA Respirable particles. 10 mg/m3 TWA Inhalable particles.	15 mg/m3 TWA (as Al) Total dust. 5 mg/m3 TWA (as Al) Respirable fraction. 15 MPPCF TWA Respirable fraction. 15 mg/m3 TWA Total dust. 5 mg/m3 TWA Respirable fraction. 50 MPPCF TWA Total dust.	None	None
2,4,6-tris(dimethylaminomethyl)phenol	None	None	None	None
Residues (petroleum), thermal cracked	None	None	None	None
Distillates (petroleum), heavy thermal cracked	None	None	None	None
Styrene	20 ppm STEL 10 ppm TWA	100 ppm TWA 200 ppm Ceiling 600 ppm MAX. CONC 5 minutes in any 3 hours	None	None
Silica, amorphous, fumed, crystfree	3 mg/m3 TWA Respirable particles. 10 mg/m3 TWA Inhalable particles.	20 MPPCF TWA 0.8 mg/m3 TWA 50 MPPCF TWA Total dust. 5 mg/m3 TWA Respirable fraction. 15 mg/m3 TWA Total dust. 15 MPPCF TWA Respirable fraction.	None	None
Ethylene glycol	25 ppm TWA Vapor fraction 50 ppm STEL Vapor fraction 10 mg/m3 STEL Aerosol, inhalable.	None	None	None

Respiratory protection:

Eye/face protection:

Skin protection:

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

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

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: Color: Odor: Odor threshold: pH: Vapor pressure: Boiling point/range: Melting point/range: Specific gravity: Vapor density: Flash point: Flammable/Explosive limits - lower: Flammable/Explosive limits - lower: Flammable/Explosive limits - upper: Autoignition temperature: Flammability: Evaporation rate: Solubility in water: Partition coefficient (n-octanol/water):	Paste Black Mercaptan Not available. Not applicable Negligible > 149 °C (> 300.2 °F) Not available. 1.4 Not available. > 93 °C (> 199.4 °F) Tagliabue closed cup Not available. Not available. Not available. Not available. Not available. Not available. Not available. Not available. Not available.
•	0
VOC content:	0.04 % (value for resin and hardener together)
Viscosity:	Not available.
Decomposition temperature:	Not available.

10. STABILITY AND REACTIVITY

Stability:	Stable under normal conditions of storage and use.
Hazardous reactions:	None under normal processing.
Hazardous decomposition products:	Oxides of carbon. Oxides of nitrogen. Oxides of sulfur. Alcohols. Aldehydes. Ammonia. Ethers. Hydrogen sulfide. Nitric acid. Toxic fumes. Irritating vapors.
Incompatible materials:	Acids. Bases. Oxidizing agents. Sodium hypochlorite. Peroxides. Copper. Copper alloys. Halogens. Metal salts.
Reactivity:	Not available.
Conditions to avoid:	Excessive heat. Store away from incompatible materials. Heat, flames, sparks and other sources of ignition.

11. TOXICOLOGICAL INFORMATION

Relevant routes of exposure:

Skin, Inhalation, Eyes, Ingestion

Potential Health Effects/Symptoms

Inha	lation:
IIIIIa	iauon.

Skin contact:

Eye contact:

Ingestion:

May cause respiratory tract irritation. Vapors may cause headaches, nausea, dizziness and respiratory tract irritation. May cause irritation to nose and throat. Long-term exposure can cause liver and kidney damage. Causes skin irritation. Causes serious eye damage. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
Aluminium hydroxide	Oral LD50 (Rat) = > 5,000 mg/kg Inhalation LC50 (Rat, 4 h) = > 0.888 mg/l Inhalation LC50 (Rat, 4 h) = > 2.3 mg/l	Irritant, Lung, Respiratory
2,4,6-tris(dimethylaminomethyl)phenol	None	Irritant, Allergen
Residues (petroleum), thermal cracked	Inhalation LC50 (Rat, 4 h) = $4,500 \text{ mg/m3}$ Inhalation LC50 (Rat, 4 h) = $> 3,600 \text{ mg/m3}$ Inhalation LC50 (Rat, 4 h) = $> 320 \text{ mg/m3}$ Inhalation LC50 (Rat, 4 h) = $4,100 \text{ mg/m3}$ Inhalation LC50 (Rat, 4 h) = $4,100 \text{ mg/m3}$ Inhalation LC50 (Rat, 4 h) = $> 1,450 \text{ mg/m3}$	No Data
Distillates (petroleum), heavy thermal cracked	Inhalation LC50 (Rat, 4 h) = $4,100 \text{ mg/m3}$ Inhalation LC50 (Rat, 4 h) = $> 1,450 \text{ mg/m3}$ Inhalation LC50 (Rat, 4 h) = $> 3,600 \text{ mg/m3}$ Inhalation LC50 (Rat, 4 h) = $4,100 \text{ mg/m3}$ Inhalation LC50 (Rat, 4 h) = $4,500 \text{ mg/m3}$ Inhalation LC50 (Rat, 4 h) = 320 mg/m3	No Target Organs
Styrene	Oral LD50 (Mouse) = 316 mg/kg Oral LD50 (Rat) = 1 g/kg Oral LD50 (Rat) = 5,000 mg/kg Inhalation LC50 (Rat, 4 h) = 11.8 mg/l	Blood, Ear, Eyes, Irritant, Liver, Mutagen, Nervous System, Some evidence of carcinogenicity
Silica, amorphous, fumed, crystfree	None	No Data
Ethylene glycol	Oral LD50 (Rat) = 5.89 g/kg Oral LD50 (Mouse) = 14.6 g/kg Dermal LD50 (Rabbit) = 9,530 mg/kg	Blood, Bone Marrow, Central nervous system, Developmental, Eyes, Irritant, Kidney, Liver, Metabolic

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Aluminium hydroxide	No	No	No
2,4,6-tris(dimethylaminomethyl)phenol	No	No	No
Residues (petroleum), thermal cracked	No	Group 2B	No
Distillates (petroleum), heavy thermal cracked	No	Group 2B	No
Styrene	Reasonably Anticipated to be a Human Carcinogen.	Group 2A	No
Silica, amorphous, fumed, crystfree	No	No	No
Ethylene glycol	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.

14. TRANSPORT INFORMATION

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

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

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

Product name: LOCTITE EA 445 HARDENER known as Fast Cure Epoxy HARDENER Page 5 of 6

International Air Transportation (ICAO/IATA)

Proper shipping name: Hazard class or division: Identification number: Packing group:	Not regulated None None None
Water Transportation (IMO/IMDG)	
Proper shipping name: Hazard class or division:	Not regulated

15. REGULATORY INFORMATION

None

None

United States Regulatory Information

Identification number:

Packing group:

TSCA 8 (b) Inventory Status: TSCA 12 (b) Export Notification:	All components are listed as active or are exempt from listing on the Toxic Substances Control Act (TSCA) inventory. None above reporting de minimis
CERCLA/SARA Section 302 EHS: CERCLA/SARA Section 311/312: CERCLA/SARA Section 313: CERCLA Reportable quantity:	None above reporting de minimis. Immediate Health, Delayed Health 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). Styrene (CAS# 100-42-5). Ethylene glycol (CAS# 107-21-1). Styrene (CAS# 100-42-5) 1,000 lbs. (454 kg)
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/NDSL 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

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