



Revision Number: 004.1

Issue date: 03/15/2010

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: LOCTITE EXTRA TIME EPOXY - RESIN
Product type: Epoxy resin
Item number: 1405603
Region: United States
Company address: Henkel Corporation
 One Henkel Way
 Rocky Hill, CT 06067
Contact information:
 Telephone: 800.624.7767
 Emergency telephone: 800.424.9300

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Physical state:	Liquid	HEALTH:	2
Color:	Translucent, Clear	FLAMMABILITY:	1
Odor:	None	PHYSICAL HAZARD:	0
		Personal Protection:	See MSDS Section 8

WARNING: MAY CAUSE ALLERGIC SKIN REACTION.
 MAY CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION.

Relevant routes of exposure: Skin, Inhalation, Eyes

Potential Health Effects

Inhalation: Mild respiratory tract irritation.
Skin contact: Allergic skin reaction. Moderate skin irritation. Itching. Redness.
Eye contact: Moderate eye irritation. Redness.
Ingestion: Not expected under normal conditions of use.

Existing conditions aggravated by exposure: Skin disorders. Skin allergies.

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

See Section 11 for additional toxicological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous components	CAS NUMBER	%
Epichlorohydrin-4,4'-isopropylidene diphenol resin	25068-38-6	60 - 100

4. FIRST AID MEASURES

Inhalation: Move to fresh air. If symptoms develop and persist, get medical attention.

Skin contact: Immediately flush skin with plenty of water (using soap, if available). Remove contaminated clothing and footwear. If symptoms develop and persist, get medical attention.

Eye contact: Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.

Ingestion: Keep individual calm. DO NOT induce vomiting unless directed to do so by medical personnel. If symptoms develop and persist, get medical attention.

5. FIRE FIGHTING MEASURES

Flash point:	> 249 °C (> 480.2 °F) Pinsky Martens closed cup
Autoignition temperature:	Not available
Flammable/Explosive limits - lower:	Not available
Flammable/Explosive limits - upper:	Not available
Extinguishing media:	Foam, dry chemical or carbon dioxide.
Special firefighting procedures:	Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear.
Unusual fire or explosion hazards:	In case of fire, keep containers cool with water spray. Closed containers may rupture (due to build up of pressure) when exposed to extreme heat.
Hazardous combustion products:	Oxides of carbon. Irritating organic fragments.

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. Immediately contact emergency personnel. Scrape up as much material as possible. Clean residue with soap and water. Store in a partly filled, closed container until disposal.

7. HANDLING AND STORAGE

Handling:	Do not breathe gas/fumes/vapor/spray. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Keep container closed.
Storage:	Store in original container until ready to use. Keep in a cool, well ventilated area away from heat, sparks and open flame. Keep container tightly closed until ready for 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 components	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
Epichlorohydrin-4,4'-isopropylidene diphenol resin	None	None	None	None

Engineering controls:	Provide adequate local exhaust ventilation to maintain worker exposure below 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.
Skin protection:	Chemical resistant, impermeable gloves.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Liquid
Color:	Translucent, Clear

Odor: None
Odor threshold: Not available
pH: Not applicable
Vapor pressure: 0.03 mm Hg
Boiling point/range: > 260.2 °C (> 500.4 °F)
Melting point/ range: Not available
Specific gravity: 1.17
Vapor density: Not available
Flash point: > 249 °C (> 480.2 °F) Pensky Martens closed cup
Flammable/Explosive limits - lower: Not available
Flammable/Explosive limits - upper: Not available
Autoignition temperature: Not available
Evaporation rate: Not available
Solubility in water: Slight
Partition coefficient (n-octanol/water): Not available
VOC content: 0.1 % (value for resin and hardener together)

10. STABILITY AND REACTIVITY

Stability: Stable
Hazardous reactions: Will not occur.
Hazardous decomposition products: None
Incompatible materials: Strong oxidizing agents. Strong bases. Strong acids. Amines.
Conditions to avoid: Excessive heat. Store away from incompatible materials.

11. TOXICOLOGICAL INFORMATION

Hazardous components	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Epichlorohydrin-4,4'-isopropylidene diphenol resin	No	No	No

Hazardous components	Health Effects/Target Organs
Epichlorohydrin-4,4'-isopropylidene diphenol resin	Allergen, Irritant

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

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

Water Transportation (IMO/IMDG)

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

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 minimus
CERCLA/SARA Section 302 EHS: None above reporting de minimus
CERCLA/SARA Section 311/312: Immediate Health
CERCLA/SARA 313: None above reporting de minimus
California Proposition 65: No California Proposition 65 listed chemicals are known to be present.

Canada Regulatory Information

CEPA DSL/NDSL Status: All components are listed on or are exempt from listing on the Canadian Domestic Substances List.
WHMIS hazard class: D.2.B

16. OTHER INFORMATION

This material safety data sheet contains changes from the previous version in sections: New Material Safety Data Sheet format.

Prepared by: Regulatory Affairs

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Material Safety Data Sheet



Revision Number: 001.0

Issue date: 03/15/2010

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: LOCTITE EXTRA TIME EPOXY-HARDENER
Product type: Epoxy Hardener
Item number: 1405603
Region: United States
Company address:
Henkel Corporation
One Henkel Way
Rocky Hill, Connecticut 06067
Contact information:
Telephone: 860.571.5100
Emergency telephone: 860.571.5100
Internet: www.henkelna.com

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Physical state:	Liquid	HEALTH:	*3
Color:	Transparent, Light amber	FLAMMABILITY:	1
Odor:	Amine	PHYSICAL HAZARD:	0
		Personal Protection:	See MSDS Section 8

DANGER: CAUSES EYE, SKIN AND RESPIRATORY TRACT BURNS.
MAY CAUSE ALLERGIC SKIN AND RESPIRATORY REACTION.
HARMFUL IF SWALLOWED, ABSORBED THROUGH SKIN OR INHALED.

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

Potential Health Effects

Inhalation: Harmful if inhaled; may cause delayed lung damage. Respiratory tract burns. May cause lung damage. May cause nose, throat and lung irritation. Inhalation of aerosol may cause irritation to the upper respiratory tract. Can cause severe eye, skin and respiratory tract burns. May cause nose, throat, and lung irritation. Inhalation of vapors and/or aerosols in high concentration may cause irritation of respiratory system. May cause central nervous system effects with nausea, dizziness and headache. Severe cases of overexposure can result in respiratory failure. Inhalation of vapors or mists of the product may be irritating to the respiratory system. May cause allergic respiratory reaction.

Skin contact: Harmful in contact with skin. Causes skin burns. May cause central nervous system effects. Headache, nausea, dizziness, confusion, breathing difficulties May cause allergic skin reaction.

Eye contact: Corneal edema may give appearance of "blue haze" or "fog" around lights. Causes eye burns. May cause blindness. Severe eye irritation.

Ingestion: Harmful if swallowed. If ingested, severe burns of the mouth and throat may occur, as well as perforation of the esophagus and the stomach.

Existing conditions aggravated by exposure: Eye, skin, and respiratory disorders. Skin allergies. Kidney disorders. Liver disorders.

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

See Section 11 for additional toxicological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous components	CAS NUMBER	%
C36 Fatty acid dimer, tall oil fatty acid, triethylenetetramine polymer	68082-29-1	30 - 60
Amines	Unknown	10 - 30
4-Tert-butylphenol	98-54-4	10 - 30
Aliphatic amines	Unknown	10 - 30
1,2-Ethanediamine, N-(2-aminoethyl)-, polymer with oxirane	28063-82-3	1 - 5
Benzyl alcohol	100-51-6	1 - 5
Silica, amorphous, fumed, crystal-free	112945-52-5	1 - 5
Triethylenetetramine	112-24-3	1 - 5

4. FIRST AID MEASURES

Inhalation:	Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Skin contact:	Immediately flush skin with plenty of water (using soap, if available). Remove contaminated clothing and footwear. Wash clothing before reuse. Thoroughly clean shoes before reuse. If symptoms develop and persist, get medical attention.
Eye contact:	Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.
Ingestion:	DO NOT induce vomiting unless directed to do so by medical personnel. Keep individual calm. Get medical attention.

5. FIRE FIGHTING MEASURES

Flash point:	100 °C (212°F) ; Estimated
Autoignition temperature:	Not available
Flammable/Explosive limits - lower:	Not available
Flammable/Explosive limits - upper:	Not available
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.
Unusual fire or explosion hazards:	In case of fire, keep containers cool with water spray.
Hazardous combustion products:	Oxides of carbon, oxides of nitrogen, irritating organic vapors. Ammonia. Amines. Nitric acid. Nitrosamines.

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. Immediately contact emergency personnel. Scrape up as much material as possible. Clean residue with soap and water.

7. HANDLING AND STORAGE

Handling: Keep away from heat, spark and flame. Wash thoroughly after handling. Avoid contact with eyes, skin and clothing. Avoid breathing vapors or mists of this product. Keep container closed.

Storage: Store in original container until ready to use. Keep in a cool, well ventilated area away from heat, sparks and open flame. Keep container tightly closed until ready for use.

For information on product shelf life contact Henkel Customer Service at (800) 243-4874.

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 components	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
C36 Fatty acid dimer, tall oil fatty acid, triethylenetetramine polymer	None	None	None	None
Amines	None	None	None	None
4-Tert-butylphenol	None	None	None	None
Aliphatic amines	None	None	None	None
1,2-Ethanediamine, N-(2-aminoethyl)-, polymer with oxirane	None	None	None	None
Benzyl alcohol	None	None	10 ppm (44 mg/m ³) TWA	None
Silica, amorphous, fumed, crystal-free	10 mg/m ³ TWA Inhalable dust. 3 mg/m ³ TWA Respirable fraction.	20 MPPCF TWA 0.8 mg/m ³ TWA	None	None
Triethylenetetramine	None	None	1 ppm (6 mg/m ³) TWA (SKIN)	None

Engineering controls: Use local exhaust ventilation if the potential for airborne exposure exists.

Respiratory protection: Use NIOSH approved respirator if there is potential to exceed exposure limit(s).

Eye/face protection: Safety goggles or safety glasses with side shields.

Skin protection: Chemical resistant, impermeable gloves. Neoprene, Butyl-rubber, or nitrile-rubber gloves.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid

Color: Transparent, Light amber

Odor: Amine

Odor threshold: Not available

pH: Not available

Vapor pressure: Not available

Boiling point/range: Not available

Melting point/ range: Not available

Specific gravity: 1

Vapor density: Not available

Flash point: 100 °C (212°F) ; Estimated

Flammable/Explosive limits - lower: Not available

Flammable/Explosive limits - upper: Not available

Autoignition temperature: Not available

Evaporation rate: Not available

Solubility in water: Not available

Partition coefficient (n-octanol/water): Not available

VOC content: 0.1 g/l (calculated)

10. STABILITY AND REACTIVITY

Stability:	Stable
Hazardous reactions:	Will not occur.
Hazardous decomposition products:	None
Incompatible materials:	Strong acids. Strong oxidizing agents. Halogenated compounds. Strong mineral acids. Reactive metals. Calcium hypochlorite. Sodium hypochlorite. Nitrous acid and other nitrosating agents.
Conditions to avoid:	Excessive heat. Store away from incompatible materials.

11. TOXICOLOGICAL INFORMATION

Hazardous components	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
C36 Fatty acid dimer, tall oil fatty acid, triethylenetetramine polymer	No	No	No
Amines	No	No	No
4-Tert-butylphenol	No	No	No
Aliphatic amines	No	No	No
1,2-Ethanediamine, N-(2-aminoethyl)-, polymer with oxirane	No	No	No
Benzyl alcohol	No	No	No
Silica, amorphous, fumed, crystal-free	No	No	No
Triethylenetetramine	No	No	No

Hazardous components	Health Effects/Target Organs
C36 Fatty acid dimer, tall oil fatty acid, triethylenetetramine polymer	No Records
Amines	No Data
4-Tert-butylphenol	Irritant, Allergen, Skin, Corrosive
Aliphatic amines	No Data
1,2-Ethanediamine, N-(2-aminoethyl)-, polymer with oxirane	No Records
Benzyl alcohol	Allergen, Central nervous system, Corrosive, Irritant
Silica, amorphous, fumed, crystal-free	Nuisance dust
Triethylenetetramine	Allergen, Corrosive, Developmental, Irritant, Mutagen

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

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

Proper shipping name:	Corrosive liquids, n.o.s. (p-tert Butyl phenol)
Hazard class or division:	8
Identification number:	UN 1760
Packing group:	III

International Air Transportation (ICAO/IATA)

Proper shipping name: Corrosive liquid, n.o.s. (p-tert Butyl phenol)
Hazard class or division: 8
Identification number: UN 1760
Packing group: III

Water Transportation (IMO/IMDG)

Proper shipping name: CORROSIVE LIQUID, N.O.S. (p-tert Butyl phenol)
Hazard class or division: 8
Identification number: UN 1760
Packing group: III

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 minimus
CERCLA/SARA Section 302 EHS: None above reporting de minimus
CERCLA/SARA Section 311/312: Immediate Health, Delayed Health
CERCLA/SARA 313: None above reporting de minimus
California Proposition 65: No California Proposition 65 listed chemicals are known to be present.

Canada Regulatory Information

CEPA DSL/NDSL Status: All components are listed on or are exempt from listing on the Domestic Substances List.
WHMIS hazard class: D.2.A, D.2.B, E

16. OTHER INFORMATION

This material safety data sheet contains changes from the previous version in sections: First issue.

Prepared by: Regulatory Affairs Specialist

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