

Material Safety Data Sheet



Revision Number: 001.0

Issue date: 03/25/2010

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: LePage Aqua Marine Epoxy -Resin
Product use: Adhesive
Item number: 1418138
Region: Canada
Company address: Henkel Canada Corporation
6685 Kennedy Rd Suite 1
Mississauga, Ontario L5T 3A5
Contact information: Telephone: 800-624-7767
Emergency telephone: 613.996.6666

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Physical state: Liquid, Paste
Color: Tan
Odor: Slight
WHMIS hazard class: D.2.A, D.2.B

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. Coughing.
Skin contact: May cause allergic skin reaction. Moderate skin irritation. Itching. Redness.
Eye contact: Moderate eye irritation. Excess tearing.
Ingestion: Not expected to be harmful by ingestion.

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

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	30 - 60
Quartz (SiO ₂)	14808-60-7	30 - 60
Calcium carbonate	471-34-1	10 - 30

4. FIRST AID MEASURES

Inhalation: Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. If symptoms develop and persist, get medical attention.

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

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. Never give anything by mouth to an unconscious person. Get immediate medical attention.

5. FIRE FIGHTING MEASURES

Flash point:	204.44 °C (399.99 °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. 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:	Acids. Phenolics. Toxic fumes. Aldehydes. Oxides of carbon. Irritating organic fragments.
Sensitivity to Mechanical Impact:	Not available
Sensitivity to static discharge:	Not available

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:	Follow all local, state, federal and provincial regulations for disposal.
Clean-up methods:	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:	Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Do not taste or swallow.
Storage:	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
Quartz (SiO ₂)	0.025 mg/m ³ TWA Respirable fraction.	2.4 MPPCF TWA Respirable. 0.1 mg/m ³ TWA Respirable. 0.3 mg/m ³ TWA Total dust.	None	None
Calcium carbonate	10 mg/m ³ TWA Total dust.	5 mg/m ³ TWA Respirable fraction. 15 mg/m ³ TWA Total dust.	None	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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid, Paste
Color: Tan
Odor: Slight
Odor threshold: Not available
pH: Not available
Vapor pressure: Not available
Boiling point/range: Not available
Melting point/ range: Not available
Specific gravity: 1.56
Vapor density: Not available
Flash point: 204.44 °C (399.99 °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: Insoluble
Partition coefficient (n-octanol/water): Not available
VOC content: 0 % (calculated)

10. STABILITY AND REACTIVITY

Stability: Stable

Hazardous reactions: Will not occur.

Hazardous decomposition products: None

Incompatible materials: Strong Lewis acids. Strong bases. Strong mineral acids. Strong oxidizing agents. Mercaptans. Amines.

Conditions to avoid: Store away from incompatible materials.

11. TOXICOLOGICAL INFORMATION

Toxicologically synergistic products: Not available

Refer to the following for Irritancy of Product, Sensitization to Product, Carcinogenicity, Reproductive Toxicity, Teratogenicity, and Mutagenicity.

Hazardous components	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)	ACGIH Carcinogen
Epichlorohydrin-4,4'-isopropylidene diphenol resin	No	No	No	No
Quartz (SiO ₂)	Known carcinogen.	Group 1	No	Group A2
Calcium carbonate	No	No	No	No

Hazardous components	LD50s and LC50s	Health Effects/Target Organs
Epichlorohydrin-4,4'-isopropylidene diphenol resin	None	Allergen, Irritant
Quartz (SiO ₂)	None	Immune system, Lung, Some evidence of carcinogenicity
Calcium carbonate	Oral LD50 (RAT) = 6,450 mg/kg	Nuisance dust

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

Canada Transportation of Dangerous Goods - Ground

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. (epoxy 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. (epoxy resin)
Hazard class or division: 9
Identification number: UN 3082
Packing group: III
Marine pollutant: epoxy resin
Exceptions: Classified per IMDG Amendment 34; Effective Jan 1, 2010.

15. REGULATORY INFORMATION

Canada Regulatory Information

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

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.

16. OTHER INFORMATION

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

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulation (CPR), and the MSDS contains all the information required by the CPR.

Prepared by: Regulatory Affairs Specialist

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Material Safety Data Sheet



Revision Number: 001.0

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1. PRODUCT AND COMPANY IDENTIFICATION

Product name: Loctite Aqua Marine Epoxy -Hardener
Product use: Adhesive
Item number: 1418138
Region: Canada
Company address: Henkel Canada Corporation
6685 Kennedy Rd Suite 1
Mississauga, Ontario L5T 3A5
Contact information: Telephone: 800.624.7767
Emergency telephone: 613.996.6666

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Physical state: Liquid, Paste
Color: White
Odor: Amine
WHMIS hazard class: D.2.A, D.2.B, E

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

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

Potential Health Effects

Inhalation: Respiratory tract burns. May be harmful if inhaled. Shortness of breath. Coughing.
Skin contact: Causes skin burns. May be harmful if absorbed through skin. May cause allergic skin reaction. Itching. Rash. Pain and discomfort. Tissue damage.
Eye contact: Causes eye burns. Blurred vision. Excess tearing. Pain and discomfort. Tissue damage.
Ingestion: May be harmful if swallowed.

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

See Section 11 for additional toxicological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous components	CAS NUMBER	%
Quartz (SiO ₂)	14808-60-7	30 - 60
Aliphatic amine	Unknown	10 - 30
Calcium carbonate	471-34-1	10 - 30
Benzyl alcohol	100-51-6	5 - 10
3- Aminomethyl-3,5,5-trimethylcyclohexylamine	2855-13-2	5 - 10
1,3-Propanediamine, N-[3-(tridecyloxy)propyl]-, branched	68479-04-9	5 - 10
Titanium dioxide	13463-67-7	1 - 5
2,4,6-Tris(dimethylaminomethyl)phenol	90-72-2	1 - 5
Propanediol-1,2	57-55-6	1 - 5
N-Aminoethylpiperazine	140-31-8	1 - 5
4-Tert-butylphenol	98-54-4	1 - 5

4. FIRST AID MEASURES

Inhalation:	If not breathing, give artificial respiration. If breathing is difficult, give oxygen. 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. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.
Eye contact:	Flush eye(s) immediately with plenty of water. Check for and remove any contact lenses. 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. Never give anything by mouth to an unconscious person. Get immediate medical attention.

5. FIRE FIGHTING MEASURES

Flash point:	96.11 °C (205°F) ; Estimated
Autoignition temperature:	Not available
Flammable/Explosive limits - lower:	Not available
Flammable/Explosive limits - upper:	Not available
Extinguishing media:	Use dry chemical, water spray or carbon dioxide. Alcohol-resistant foam.
Special firefighting procedures:	Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear. Caution should be exercised when using water or foam as frothing may occur. 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. Decomposition and combustion products may be toxic.
Hazardous combustion products:	Oxides of carbon. Oxides of nitrogen. Ammonia.
Sensitivity to Mechanical Impact:	Not available
Sensitivity to static discharge:	Not available

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

7. HANDLING AND STORAGE

Handling:	Avoid breathing dust. Do not taste or swallow. Avoid contact with eyes, skin and clothing. Do not get in eyes. Do not get on skin or clothing. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling.
Storage:	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
Quartz (SiO ₂)	0.025 mg/m ³ TWA Respirable fraction.	2.4 MPPCF TWA Respirable. 0.1 mg/m ³ TWA Respirable. 0.3 mg/m ³ TWA Total dust.	None	None
Aliphatic amine	None	None	None	None
Calcium carbonate	10 mg/m ³ TWA Total dust.	5 mg/m ³ TWA Respirable fraction. 15 mg/m ³ TWA Total dust.	None	None
Benzyl alcohol	None	None	10 ppm (44 mg/m ³) TWA	None
3- Aminomethyl-3,5,5-trimethylcyclohexylamine	None	None	None	None
1,3-Propanediamine, N-[3-(tridecyloxy)propyl]-, branched	None	None	None	None
Titanium dioxide	10 mg/m ³ TWA	15 mg/m ³ TWA Total dust.	None	None
2,4,6-Tris(dimethylaminomethyl)phenol	None	None	None	None
Propanediol-1,2	None	None	10 mg/m ³ TWA Aerosol.	None
N-Aminoethylpiperazine	None	None	None	None
4-Tert-butylphenol	None	None	None	None

Engineering controls:

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

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. Full face protection should be used if the potential for splashing or spraying of product exists.

Skin protection:

Chemical resistant, impermeable gloves. Neoprene gloves. Nitrile gloves. Butyl rubber gloves. Viton gloves.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Liquid, Paste
Color:	White
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:	1.49
Vapor density:	Not available
Flash point:	96.11 °C (205°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 %; 0 g/l (calculated)

10. STABILITY AND REACTIVITY

Stability:	Stable
Hazardous reactions:	Will not occur.
Hazardous decomposition products:	None
Incompatible materials:	Strong Lewis acids. Strong mineral acids. Strong bases. Strong oxidizing agents. Chlorinated rubber. Reaction with epoxy resins and/or isocyanates in large amounts or under uncontrolled conditions releases considerable heat and may release acrid fumes. N-Nitrosamines.
Conditions to avoid:	Store away from incompatible materials.

11. TOXICOLOGICAL INFORMATION

Toxicologically synergistic products: Not available

Refer to the following for Irritancy of Product, Sensitization to Product, Carcinogenicity, Reproductive Toxicity, Teratogenicity, and Mutagenicity.

Hazardous components	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)	ACGIH Carcinogen
Quartz (SiO ₂)	Known carcinogen.	Group 1	No	Group A2
Aliphatic amine	No	No	No	No
Calcium carbonate	No	No	No	No
Benzyl alcohol	No	No	No	No
3- Aminomethyl-3,5,5-trimethylcyclohexylamine	No	No	No	No
1,3-Propanediamine, N-[3-(tridecyloxy)propyl]-, branched	No	No	No	No
Titanium dioxide	No	Group 2B	No	Group A4
2,4,6-Tris(dimethylaminomethyl)phenol	No	No	No	No
Propanediol-1,2	No	No	No	No
N-Aminoethylpiperazine	No	No	No	No
4-Tert-butylphenol	No	No	No	No

Hazardous components	LD50s and LC50s	Health Effects/Target Organs
Quartz (SiO ₂)	None	Immune system, Lung, Some evidence of carcinogenicity
Aliphatic amine	None	No Data
Calcium carbonate	Oral LD50 (RAT) = 6,450 mg/kg	Nuisance dust
Benzyl alcohol	Oral LD50 (rabbit) = 1,940 mg/kg Oral LD50 (RAT) = 3,100 mg/kg Oral LD50 (RAT) = 1,230 - 3,100 mg/kg Dermal LD50 (rabbit) = 2,000 mg/kg Inhalation LC50 (RAT, 8 h) = 1,000 mg/l	Allergen, Central nervous system, Corrosive, Irritant
3- Aminomethyl-3,5,5-trimethylcyclohexylamine	None	Irritant, Allergen, Corrosive, Lung
1,3-Propanediamine, N-[3-(tridecyloxy)propyl]-, branched	None	No Target Organs
Titanium dioxide	None	Irritant, Respiratory, Some evidence of carcinogenicity
2,4,6-Tris(dimethylaminomethyl)phenol	None	Irritant, Allergen
Propanediol-1,2	Oral LD50 (RAT) = 30,000 mg/kg Oral LD50 (rabbit) = 18,000 mg/kg	Irritant
N-Aminoethylpiperazine	None	Irritant, Corrosive, Allergen
4-Tert-butylphenol	None	Irritant, Allergen, Skin, Corrosive

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

Canada Transportation of Dangerous Goods - Ground

Proper shipping name: POLYAMINES, LIQUID, CORROSIVE, N.O.S. (aliphatic Amine, Isophoronediamine)
Hazard class or division: 8
Identification number: UN 2735
Packing group: III

International Air Transportation (ICAO/IATA)

Proper shipping name: Polyamines, liquid, corrosive, n.o.s. (aliphatic Amine, Isophoronediamine)
Hazard class or division: 8
Identification number: UN 2735
Packing group: III

Water Transportation (IMO/IMDG)

Proper shipping name: POLYAMINES, LIQUID, CORROSIVE, N.O.S. (aliphatic Amine, Isophoronediamine)
Hazard class or division: 8
Identification number: UN 2735
Packing group: III

15. REGULATORY INFORMATION

Canada Regulatory Information

CEPA DSL/NDL Status: One or more components are not listed on, and are not exempt from listing on either the Domestic Substances List or the Non-Domestic Substances List.

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.

16. OTHER INFORMATION

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

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulation (CPR), and the MSDS contains all the information required by the CPR.

Prepared by: Regulatory Affairs Specialist

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