

Revision Number: 004.0 Issue date: 12/17/2014

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: LOCTITE 3873 known as 3873(TM)

Adhesive Thermally Co

Product type: Anaerobic Adhesive
Restriction of Use: None identified

Company address:

Henkel Electronic Materials LLC 14000 Jamboree Road Irvine, CA 92606 **IDH number:** 234476

Item number: 29822
Region: United States

Contact information:

Telephone: +1 (888) 943-6535

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.henkel.com/electronics

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

WARNING: COMBUSTIBLE LIQUID.

CAUSES SKIN IRRITATION.

MAY CAUSE AN ALLERGIC SKIN REACTION.

CAUSES SERIOUS EYE IRRITATION.
MAY CAUSE RESPIRATORY IRRITATION.

HAZARD CLASS	HAZARD CATEGORY
FLAMMABLE LIQUID	4
SKIN IRRITATION	2
EYE IRRITATION	2A
SKIN SENSITIZATION	1
SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE	3

PICTOGRAM(S)



Precautionary Statements

Prevention: Keep away from heat, sparks, open flames, hot surfaces - no smoking. Avoid breathing vapors,

mist, or spray. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Contaminated work clothing should not be allowed out of the workplace. Wear protective

gloves, eye protection, and face protection.

Response: IF ON SKIN: Wash with plenty of soap and water. IF INHALED: Remove person to fresh air and

keep comfortable for breathing.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to remove. Continue rinsing. Call a poison control center or physician if you feel unwell. If skin irritation or rash occurs: Get medical attention. If eye irritation persists: Get medical attention. Take off contaminated clothing. In case of fire: Use foam, dry chemical or

carbon dioxide to extinguish.

Storage: Store in a well-ventilated place. Keep container tightly closed. Store in a well-ventilated place.

Keep cool. Store locked up.

Disposal: Dispose of contents and/or container according to Federal, State/Provincial and local

governmental regulations.

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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*	
Aluminum oxide, fibrous	1344-28-1	30 - 60	
Aluminium hydroxide	21645-51-2	10 - 30	
Hydroxyalkyl methacrylate	27813-02-1	10 - 30	
Polyurethane Methacrylate Resin	Unknown	5 - 10	
2-Hydroxyethyl methacrylate	868-77-9	1 - 5	
High boiling methacrylate	Proprietary	1 - 5	
Glass, oxide, chemicals	65997-17-3	0.1 - 1	
Cumene hydroperoxide	80-15-9	0.1 - 1	
Methanol	67-56-1	0.1 - 1	
Methacrylic acid	79-41-4	0.1 - 1	
Boron oxide (B2O3)	1303-86-2	0.1 - 1	

^{*} Exact percentage is a trade secret. Concentration range is provided to assist users in providing appropriate protections.

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: Remove contaminated clothing and footwear. Immediately flush skin with

plenty of water (using soap, if available). Get medical attention. Wash clothing

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. 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.

Uncontrolled polymerization may occur at high temperatures resulting in

explosions or rupture of storage containers.

Hazardous combustion products: Oxides of carbon. Irritating organic vapours.

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.

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Remove all sources of ignition. Evacuate and ventilate spill area; dike spill to prevent entry into water system; wear full protective equipment during clean-up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Scrape up as much material as possible. Store in a partly filled, closed container until disposal. Refer to Section 8 "Exposure Controls / Personal Protection" prior to clean up.

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. Refer to Section 8.

Storage: For safe storage, store at or below 38 °C (100.4 °F)

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 Component(s)	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
Aluminum oxide, fibrous	1 mg/m3 TWA Respirable fraction.	5 mg/m3 PEL Respirable fraction. 15 mg/m3 PEL Total dust.	None	None
Aluminium hydroxide	10 mg/m3 TWA (as Al) Total dust. 1 mg/m3 TWA Respirable fraction.	15 mg/m3 TWA (as Al) Total dust. 5 mg/m3 TWA (as Al) Respirable fraction.	None	None
Hydroxyalkyl methacrylate	None	None	None	1 ppm TWA 3 ppm STEL
Polyurethane Methacrylate Resin	None	None	None	None
2-Hydroxyethyl methacrylate	None	None	None	3 ppm Ceiling
High boiling methacrylate	None	None	None	None
Glass, oxide, chemicals	10 mg/m3 TWA Inhalable dust. 3 mg/m3 TWA Respirable fraction. 5 mg/m3 TWA Inhalable fraction. 1 FIBERS/CM3 TWA Fiber. 0.2 FIBERS/CM3 TWA Fiber.	15 mg/m3 TWA Total dust. 5 mg/m3 TWA Respirable fraction.	None	None
Cumene hydroperoxide	None	None	1 ppm (6 mg/m3) TWA (SKIN)	None
Methanol	200 ppm TWA (SKIN) 250 ppm STEL	200 ppm (260 mg/m3) PEL	None	None
Methacrylic acid	20 ppm TWA	None	None	None
Boron oxide (B2O3)	10 mg/m3 TWA	15 mg/m3 PEL Total dust.	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).

Eve/face protection: Safety googles 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. Neoprene gloves. Butyl rubber

gloves. Natural rubber gloves.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid
Color: Gray
Odor: Mild

Odor threshold:

pH:

Not available.

Not applicable

Vapor pressure:

Vap

Specific gravity: 2.0746
Vapor density: Not available.

Flash point: 75.0 - 90 °C (167°F - 194°F)

Flammable/Explosive limits - lower:

Flammable/Explosive limits - upper:

Autoignition temperature:

Evaporation rate:

Solubility in water:

Partition coefficient (n-octanol/water):

Not available.

Slight

Not available.

VOC content: 17.78 %; 364 g/l EPA Method 24

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. Polymerization may occur at elevated temperature or in the

presence of incompatible materials.

Hazardous decomposition

products:

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Oxides of carbon. Irritating organic vapours.

Incompatible materials: Reducing agents. Free radical initiators. Amines. Peroxides. This chemical contains heavy

metals. Strong oxidizing agents. Oxygen scavengers. Alkalis. Other polymerization initiators.

Reactivity: Not available.

Conditions to avoid: Heat, flames, sparks and other sources of ignition. Store away from incompatible materials.

11. TOXICOLOGICAL INFORMATION

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

Potential Health Effects/Symptoms

May cause respiratory tract irritation. May cause irritation to nose and throat. Inhalation of vapors or mists of the product may be irritating to the respiratory system. Inhalation:

Skin contact: Causes skin irritation. May cause allergic skin reaction.

Causes serious eye irritation. Eye contact:

Ingestion: May cause kidney, liver, lung, or gastrointestinal abnormalities.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects	
Aluminum oxide, fibrous	None	Irritant, Nuisance dust, Corrosive	
Aluminium hydroxide	Oral LD50 (RAT) = > 5,000 mg/kg	Irritant, Lung, Respiratory	
Hydroxyalkyl methacrylate	None	Irritant, Allergen	
Polyurethane Methacrylate Resin	None	Irritant, Allergen	
2-Hydroxyethyl methacrylate	Oral LD50 (RAT) = 11.2 g/kg Oral LD50 (RAT) = 5,050 mg/kg	Irritant, Allergen	
High boiling methacrylate	None	Irritant, Allergen	
Glass, oxide, chemicals	None	Allergen, Respiratory	
Cumene hydroperoxide	None	Allergen, Central nervous system, Corrosive, Irritant, Mutagen	
Methanol	Oral LD50 (RAT) = 5,628 mg/kg Oral LD50 (RABBIT) = 14.4 g/kg Dermal LD50 (RABBIT) = 15,800 mg/kg Inhalation LC50 (RAT, 6 h) = 87.5 mg/l Inhalation LC50 (RAT, 4 h) = 64000 ppm	Eyes, Heart, Irritant, Kidney, Liver, Metabolic, Nervous System, Reproductive	
Methacrylic acid	Oral LD50 (RABBIT) = 1,200 mg/kg Oral LD50 (RAT) = 1,060 mg/kg Oral LD50 (RAT) = 2,224 mg/kg Dermal LD50 (RABBIT) = 500 mg/kg Inhalation LC50 (RAT, 4 h) = 7.1 mg/l	Corrosive, Irritant, Allergen	
Boron oxide (B2O3)	None	Blood, Central nervous system, Gastrointestinal, Irritant, Kidney, Liver, Lung, Metabolic, Nuisance dust, Skin, Vascular	

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Aluminum oxide, fibrous	No	No	No
Aluminium hydroxide	No	No	No
Hydroxyalkyl methacrylate	No	No	No
Polyurethane Methacrylate Resin	No	No	No
2-Hydroxyethyl methacrylate	No	No	No
High boiling methacrylate	No	No	No
Glass, oxide, chemicals	Reasonably Anticipated to be a Human Carcinogen.	Group 2B	No
Cumene hydroperoxide	No	No	No
Methanol	No	No	No
Methacrylic acid	No	No	No
Boron oxide (B2O3)	No	No	No

12. ECOLOGICAL INFORMATION

Ecological information: Not available.

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

International Air Transportation (ICAO/IATA)

Proper shipping name:
Hazard class or division:
Identification number:
Packing group:

Not regulated
None
None

Water Transportation (IMO/IMDG)

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

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, Fire

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 oxide, fibrous (CAS# 1344-28-1).

CERCLA Reportable quantity: Cumene hydroperoxide (CAS# 80-15-9) 10 lbs. (4.54 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

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CEPA DSL/NDSL 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.

16. OTHER INFORMATION

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

Prepared by: Sheila Gines, Regulatory Affairs Specialist

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Product name: LOCTITE 3873 known as 3873(TM) Adhesive Thermally Co Page 6 of 7 **DISCLAIMER:** The data contained herein are furnished for information only and are believed to be reliable. However, Henkel Corporation and its affiliates ("Henkel") does not assume responsibility for any results obtained by persons over whose methods Henkel has no control. It is the user's responsibility to determine the suitability of Henkel's products or any production methods mentioned herein for a particular purpose, and to adopt such precautions as may be advisable for the protection of property and persons against any hazards that may be involved in the handling and use of any Henkel's products. In light of the foregoing, Henkel specifically disclaims all warranties, express or implied, including warranties of merchantability and fitness for a particular purpose, arising from sale or use of Henkel's products. Henkel further disclaims any liability for consequential or incidental damages of any kind, including lost profits.

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