



Revision Number: 003.0

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1. PRODUCT AND COMPANY IDENTIFICATION

Product name: LOCTITE EA 3473 known as Fixmaster **Fast Set Steel Putty** **IDH number:** 702088
Product type: Epoxy Hardener **Item number:** 39917_220000
Restriction of Use: None identified **Region:** United States
Company address: **Contact information:**
 Henkel Corporation Telephone: (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

Prevention: Avoid breathing dust or fumes. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wear eye and face protection. Wear protective gloves.
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 skin irritation or rash occurs: Get medical attention. If eye irritation persists: Get medical attention. Take off contaminated clothing.
Storage: Not prescribed
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*
Polymercaptan hardener	Proprietary	30 - 60
Quartz (SiO ₂)	14808-60-7	10 - 30
Calcium carbonate	471-34-1	10 - 30
Aluminum	7429-90-5	1 - 5
Substituted aminophenol	Proprietary	1 - 5
Titanium dioxide	13463-67-7	1 - 5
Substituted aminophenol	Proprietary	0.1 - 1
Aluminium hydroxide	21645-51-2	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:	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. May liberate large quantities of dense, foul-smelling smoke which may contain unidentified toxic gasses.
Hazardous combustion products:	Oxides of carbon, oxides of nitrogen, irritating organic vapors. Oxides of sulfur. Ammonia.

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; 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: 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
Polymercaptan hardener	None	None	None	None
Quartz (SiO ₂)	0.025 mg/m ³ TWA Respirable fraction.	0.3 mg/m ³ TWA Total dust. 2.4 MPPCF TWA Respirable. 0.1 mg/m ³ TWA Respirable.	None	None
Calcium carbonate	10 mg/m ³ TWA Total dust.	5 mg/m ³ PEL Respirable fraction. 15 mg/m ³ PEL Total dust.	None	None
Aluminum	1 mg/m ³ TWA Respirable fraction.	5 mg/m ³ PEL (as Al) Respirable dust. 15 mg/m ³ PEL (as Al) Total dust.	None	None
Substituted aminophenol	None	None	None	None
Titanium dioxide	10 mg/m ³ TWA	15 mg/m ³ PEL Total dust.	None	None
Substituted aminophenol	None	None	None	None
Aluminium hydroxide	10 mg/m ³ TWA (as Al) Total dust. 1 mg/m ³ TWA Respirable fraction.	15 mg/m ³ TWA (as Al) Total dust. 5 mg/m ³ TWA (as Al) Respirable fraction.	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. 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:	Paste
Color:	White
Odor:	Pungent
Odor threshold:	Not available.
pH:	Not available.
Vapor pressure:	Not determined
Boiling point/range:	199 °C (390.2 °F)
Melting point/ range:	Not available.
Specific gravity:	1.7551

Vapor density:	Heavier than air.
Flash point:	121 °C (249.8 °F) Tagliabue closed cup
Flammable/Explosive limits - lower:	Not available.
Flammable/Explosive limits - upper:	Not available.
Autoignition temperature:	Not available.
Evaporation rate:	Slower than butyl acetate.
Solubility in water:	Slight
Partition coefficient (n-octanol/water):	Not available.
VOC content:	< 1.0 % (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:	None under normal processing.
Hazardous decomposition products:	Oxides of carbon. Oxides of nitrogen. Oxides of sulfur. Ammonia. Irritating organic vapours.
Incompatible materials:	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.
Reactivity:	Not available.
Conditions to avoid:	Elevated temperatures. Heat, flames, sparks and other sources of ignition. Store away from incompatible materials.

11. TOXICOLOGICAL INFORMATION

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

Inhalation: Inhalation of vapors or mists of the product may be irritating to the respiratory system. Vapors may cause headaches, nausea, dizziness and respiratory tract irritation.
Skin contact: Causes skin irritation. May cause allergic skin reaction. Redness.
Eye contact: Causes serious eye irritation. Redness. May injure eye tissue if not removed promptly.
Ingestion: May cause gastrointestinal tract irritation if swallowed.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
Polymercaptan hardener	None	No Records
Quartz (SiO ₂)	None	Immune system, Lung, Some evidence of carcinogenicity
Calcium carbonate	Oral LD50 (RAT) = 6,450 mg/kg	Nuisance dust
Aluminum	None	Central nervous system, Irritant, Lung
Substituted aminophenol	None	Irritant, Allergen
Titanium dioxide	None	Irritant, Respiratory, Some evidence of carcinogenicity
Substituted aminophenol	None	No Records
Aluminium hydroxide	Oral LD50 (RAT) = > 5,000 mg/kg	Irritant, Lung, Respiratory

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Polymercaptan hardener	No	No	No
Quartz (SiO ₂)	Known To Be Human Carcinogen.	Group 1	No
Calcium carbonate	No	No	No
Aluminum	No	No	No
Substituted aminophenol	No	No	No
Titanium dioxide	No	Group 2B	No
Substituted aminophenol	No	No	No
Aluminium hydroxide	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: Not regulated
Hazard class or division: None
Identification number: None
Packing group: 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
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.

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: New Safety Data Sheet format.

Prepared by: Rena Petrides, Regulatory Affairs Specialist

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