Material Safety Data Sheet

Revision Number: 001.1 **Issue date:** 07/01/2009

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: **Fixmaster Aluminum Putty**
Product type: Epoxy Hardener

IDH number: 702241
Item number: 97463_318000
Region: United States

Company address:
Henkel Corporation
1001 Trout Brook Crossing
Rocky Hill, Connecticut 06067

Contact information:
Telephone: 860.571.5100
Emergency telephone: 860.571.5100
Internet: www.henkelna.com

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

HMIS:

Physical state:	Paste	**HEALTH:**	*3
Color:	Silver	**FLAMMABILITY:**	1
Odor:	Slight, Ammoniacal	**PHYSICAL HAZARD:**	0
		Personal Protection:	See MSDS Section 8

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

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

Potential Health Effects

Inhalation: May cause allergic respiratory reaction. May cause respiratory tract irritation. May cause irritation to nose and throat. Shortness of breath. Coughing.

Skin contact: Causes skin burns. May be harmful if absorbed through skin. May cause allergic skin reaction. Rash. Redness. Pain and discomfort.

Eye contact: Causes eye burns. Blurred vision. Excess tearing. Pain and discomfort. Tissue damage. Corneal edema may give appearance of "blue haze" or "fog" around lights. Redness.

Ingestion: May be harmful if swallowed. May cause burns of mouth and throat if swallowed. May cause an aspiration hazard if swallowed. Aspirated material can enter the lungs and result in pneumonitis.

Existing conditions aggravated by exposure: Eye, skin, and respiratory 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	%
Amine adduct	Proprietary	30 - 60
Triethylenetetramine	112-24-3	10 - 30
Aluminum	7429-90-5	5 - 10
Silicon dioxide	7631-86-9	5 - 10
N-Aminoethylpiperazine	140-31-8	5 - 10
4,4'-Isopropylidenediphenol	80-05-7	5 - 10
Polyoxypropylentriamine	64852-22-8	1 - 5
Nonylphenol	25154-52-3	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. Never give anything by mouth to an unconscious person. Keep individual calm. Get medical attention.

5. FIRE FIGHTING MEASURES

Flash point: > 93.4 °C (> 200.12 °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 fragments. Nitric acid. Ammonia. Aldehydes. Ketones. Phenolics.

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 closed container until ready for disposal.

7. HANDLING AND STORAGE

Handling: Do not taste or swallow. Keep away from heat, spark and flame. Prevent contact with eyes, skin and clothing. Do not breathe vapor and mist. 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.

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
Amine adduct	None	None	None	None
Triethylenetetramine	None	None	1 ppm (6 mg/m3) TWA (SKIN)	None
Aluminum	1 mg/m3 TWA Respirable fraction.	15 mg/m3 TWA (as Al) Total dust. 5 mg/m3 TWA (as Al) Respirable dust.	None	None
Silicon dioxide	6 mg/m3 TWA	20 MPPCF TWA 0.8 mg/m3 TWA	None	3 mg/m3 TWA Respirable fraction.
N-Aminoethylpiperazine	None	None	None	None
4,4'-Isopropylidenediphenol	None	None	None	None
Polyoxypropylentriamine	None	None	None	None
Nonylphenol	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. Use chemical resistant, impermeable clothing including gloves and either an apron or body suit to prevent skin contact. Neoprene, Butyl-rubber, or nitrile-rubber gloves. Viton gloves.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Paste
Color: Silver
Odor: Slight, Ammoniacal
Odor threshold: Not available
pH: Not applicable
Vapor pressure: Not available
Boiling point/range: Not available
Melting point/ range: Not available
Specific gravity: 1.5
Vapor density: Not available
Flash point: > 93.4 °C (> 200.12 °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: Partially soluble

Partition coefficient (n-octanol/water): Not available
VOC content: < 1.0 %; < 10 g/l (value for resin and hardener together) (estimated)

10. STABILITY AND REACTIVITY

Stability: Stable

Hazardous reactions: Polymerization is a highly exothermic reaction and may generate sufficient heat to cause thermal decomposition and/or rupture containers.

Hazardous decomposition products: None

Incompatible materials: Strong acids and strong bases. Strong oxidizing agents. Amines. Strong mineral acids. Calcium hypochlorite. Sodium hypochlorite. Copper. Aluminum. Zinc. 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)
Amine adduct	No	No	No
Triethylenetetramine	No	No	No
Aluminum	No	No	No
Silicon dioxide	No	No	No
N-Aminoethylpiperazine	No	No	No
4,4'-Isopropylidenediphenol	No	No	No
Polyoxypropylentriamine	No	No	No
Nonylphenol	No	No	No

Hazardous components	Health Effects/Target Organs
Amine adduct	No Records
Triethylenetetramine	Allergen, Corrosive, Developmental, Irritant, Mutagen
Aluminum	Central nervous system, Irritant, Lung
Silicon dioxide	Nuisance dust
N-Aminoethylpiperazine	Irritant, Corrosive, Allergen
4,4'-Isopropylidenediphenol	Allergen, Blood, Irritant, Kidney, Reproductive, Spleen
Polyoxypropylentriamine	No Records
Nonylphenol	Allergen, Corrosive, Irritant, Kidney

12. ECOLOGICAL INFORMATION

Ecological information: Not available

13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal: Dispose of according to Federal, State and local governmental regulations.

Hazardous waste number: Not a RCRA hazardous waste.

14. TRANSPORT INFORMATION

The shipping classifications in this sections are for non-bulk packaging only (unless otherwise specified). Shipping classification may be different for bulk packaging.

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

Proper shipping name:	Amines, liquid, corrosive, n.o.s. (Aminoethylpiperazine, Triethylenetetramine)
Hazard class or division:	8
Identification number:	UN 2735
Packing group:	II
Exceptions:	(Not more than 1 Liter), Consumer Commodity, ORM-D

International Air Transportation (ICAO/IATA)

Proper shipping name:	Amines, liquid, corrosive, n.o.s. (Aminoethylpiperazine, Triethylenetetramine)
Hazard class or division:	8
Identification number:	UN 2735
Packing group:	II

Water Transportation (IMO/IMDG)

Proper shipping name:	AMINES, LIQUID, CORROSIVE, N.O.S. (Aminoethylpiperazine, Triethylenetetramine)
Hazard class or division:	8
Identification number:	UN 2735
Packing group:	II

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:	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). 4,4'-Isopropylidenediphenol (CAS# 80-05-7).
California Proposition 65:	No California Proposition 65 listed chemicals are known to be present.

Canada Regulatory Information

CEPA DSL/NDSL Status:	Contains one or more components listed on the Non-Domestic Substances List. All other components are listed on or are exempt from listing on the Domestic Substances List. Components listed on the NDSL must be tracked by all Canadian Importers of Record as required by Environment Canada. They may be imported into Canada in limited quantities. Please contact Regulatory Affairs for additional details.
WHMIS hazard class:	E, D.2.A, 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.

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