

MSDS Name: FIXMASTER ALUMINUM LIQUID RESI

Manufacturer Name: Loctite Corporation

KIT NUMBER: 97453

Address:

Street:1001 Trout Brook Crossing

City:Rocky Hill

State:Connecticut

Zip:06067

Product Codes:

97453

Components:	
H:	FIXMASTER STEEL PUTTY HARDENER
R:	FIXMASTER STEEL PUTTY RESIN

ACTIO MSDS ID: 41173

View Section : 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

SECTION 1: CHEMICAL PRODUCT and COMPANY IDENTIFICATION H

Product Name: **FIXMASTER STEEL PUTTY HARDENER**

Manufacturer MSDS.: H

Manufacturer Name: Loctite Corporation

Address: 1001 Trout Brook Crossing
Rocky Hill Connecticut 06067

Product Description: Epoxy Hardener

Business Fax: (860) 571-5465

Emergency Phone: (860) 571-5100

Health Phone: (860) 571-5100

Product Codes: H

HMIS

HEALTH	3
FIRE	1
REACTIVITY	0
PPE	

[To Top of page](#)



SECTION 2 : COMPOSITION, INFORMATION ON INGREDIENTS H

Ingredient Name	CAS#	Ingredient Percent
Amine reacted fatty acid EC Index Number: 1	68953-36-6	1-5 by Weight
N-(2-aminoethyl)- 1,2-ethane diamine EC Index Number: 1	111-40-0	0.5-1 by Weight
Glyceryl poly(oxypropylene) triamine EC Index Number: 1	64852-22-8	1-5 by Weight
N-(2-Aminoethyl)piperazin EC Index Number: 1	140-31-8	10-20 by Weight
Nonylphenol EC Index Number: 1	25154-52-3	5-10 by Weight
Amine resin EC Index Number: 1		30-40 by Weight
Polyamine EC Index Number: 1		30-40 by Weight

**SECTION 3 : HAZARDS IDENTIFICATION**

H

Signal Word:	DANGER! CAUSES EYE, SKIN AND RESPIRATORY TRACT BURNS. MAY CAUSE ALLERGIC SKIN AND RESPIRATORY REACTION. MAY BE HARMFUL IF SWALLOWED OR ABSORBED THROUGH SKIN.
Physical State:	Low viscosity liquid.
Color:	Blue.
Odor:	Ammonia-like.

Applies to all ingredients:**Potential Health Effects:**

Eye Contact:	Causes eye burns. Blurred vision. Excess tearing. Pain and discomfort. Tissue damage. Liquid, vapors and mist of this product are irritating and can cause tearing, reddening and swelling of the eyes, possibly accompanied by a stinging sensation. Corneal edema may give rise to a perception of "blue haze" or "fog" around lights.
Skin Contact:	May be harmful if absorbed through skin. Allergic skin reaction. Itching. Rash. Causes skin burns. Pain and discomfort. Tissue damage.
Inhalation:	Causes respiratory tract burns. Allergic respiratory reaction. Sensitization. Shortness of breath. Coughing.
Ingestion:	May be harmful if swallowed. Irritating and corrosive to mouth, stomach, and digestive tract. Aspiration hazard if swallowed. Material can enter lungs especially if swallowed causing damage such as chemical pneumonia.
Chronic Health Effects:	Detailed information provided in section 11.
Aggravation of Pre-Existing Conditions:	Respiratory disorders. Skin disorders. Eye disorders.
Abbreviations	Not applicable.

Amine reacted fatty acid :

OSHA Designation:	No
NTP Designation:	No
IARC Designation:	No
Target Organs:	No Records.

N-(2-aminoethyl)- 1,2-ethane diamine :

OSHA Designation:	No
NTP Designation:	No
IARC Designation:	No
Target Organs:	Allergen. Irritant. Eyes.

Glycerol poly(oxypropylene) triamine :

OSHA Designation:	No
NTP Designation:	No
IARC Designation:	No
Target Organs:	No Records.

N-(2-Aminoethyl)piperazin :

OSHA Designation:	No
NTP Designation:	No
IARC Designation:	No
Target Organs:	Irritant.

Nonylphenol :

OSHA Designation:	No
NTP Designation:	No
IARC Designation:	No
Target Organs:	Allergen. Corrosive. Irritant. Kidney.

Amine resin :

OSHA Designation:	No
NTP Designation:	No
IARC Designation:	No
Target Organs:	No Records.

Polyamine :

OSHA Designation:	No
NTP Designation:	No
IARC Designation:	No
Target Organs:	Allergen. Developmental. Irritant.

**SECTION 4 : FIRST AID MEASURES**

H

Eye Contact:	Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.
Skin Contact:	Immediately flush skin with plenty of water (using soap, if available) for at least 15 minutes while removing contaminated clothing and shoes. Immediately flush skin with plenty of water (using soap, if available). Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.
Inhalation:	Remove to fresh air. If not breathing, give artificial respiration. If

Ingestion: breathing is difficult, give oxygen. Get medical attention.
Do NOT induce vomiting unless directed to do so by medical personnel.
Never give anything by mouth to an unconscious person. Get medical attention.

Note to Physicians: None.

[To Top of page](#)



SECTION 5 : FIRE FIGHTING MEASURES H

Flash Point: CLOSED CUP : Higher than 200.F (93.3.C)
Flash Point Method: (estimated)
Extinguishing Media: In case of fire, use water spray (fog), foam, dry chemicals, or CO2.
Hazardous Combustion Byproducts: Oxides of carbon. Oxides of nitrogen. Ammonia. Aldehydes. Acids. Phenolics.
Fire Fighting Instructions: Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.
Unusual Fire Hazards: None.

[To Top of page](#)



SECTION 6 : ACCIDENTAL RELEASE MEASURES H

Leak Response: Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container.

[To Top of page](#)



SECTION 7 : HANDLING and STORAGE H

Handling: Do not swallow. Avoid contact with eyes, skin, and clothing. Do not breathe vapor or mist. Do not get in eyes, on skin, or on clothing. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling.
Storage: Keep container tightly closed. Keep in a cool and well-ventilated area. For information on product shelf life, contact Loctite Customer Service at 1(800)243-4874

[To Top of page](#)



SECTION 8 : EXPOSURE CONTROLS, PERSONAL PROTECTION H

Ventilation System: Use local exhaust ventilation to maintain airborne concentrations below established exposure limits.
Skin Protection Description: Use chemical resistant, impermeable clothing including gloves and either an apron or body suit to prevent skin contact. Butyl gloves. Nitrile gloves. Neoprene gloves.
Eye/Face Protection: Chemical splash goggles or safety glasses with side shields. Full face shield should be used if the potential exists for splashing or spraying of product.
Respiratory Protection: Use a NIOSH approved air purifying respirator with an organic cartridge if there is potential to exceed exposure limits. See Section 2 COMPOSITION/INFORMATION ON INGREDIENTS for exposure limits

Ingredient Guidelines

Ingredient: Amine reacted fatty acid

Guideline Information: Not established.;

Ingredient: Amine resin

Guideline Information: Not established.;

Ingredient: Glycerol poly(oxypropylene) triamine

Guideline Information: Not established.;

Ingredient: N-(2-aminoethyl)- 1,2-ethane diamine

Guideline Information: TWA:4.2 mg/m³ ACGIH SKIN; TWA:1 ppm ACGIH SKIN;

Ingredient: N-(2-Aminoethyl)piperazin

Guideline Information: Not established.;

Ingredient: Nonylphenol

Guideline Information: Not established.;

Ingredient: Polyamine

Guideline Information: Not established.;

[To Top of page](#)



SECTION 9 : PHYSICAL and CHEMICAL PROPERTIES H

Color: Blue.
Odor: Ammonia-like.
Physical State: Low viscosity liquid.
pH: Not available.
Vapor Pressure: Not available.
Vapor Density: Not available.
Boiling Point: 278 to 560.F (137 to 293.C)
Solubility in Water: Soluble
Specific Gravity: 0.99
Evaporation Point: Not available.
Volatile Organic Compound Content: Not available.

[To Top of page](#)



SECTION 10 : STABILITY and REACTIVITY H

Chemical Stability: Stable.
Conditions to Avoid: None known
Incompatibilities with Other Materials: Oxidizing agents. Strong Lewis acids. Strong mineral acids. Strong bases. Strong oxidizers. Aldehydes. Ketones. Acrylates. Organic halides.
Hazardous Polymerization: Will not occur.
Hazardous Decomposition Products: None known

[To Top of page](#)



SECTION 11 : TOXICOLOGICAL INFORMATION H

Toxicological Paragraph: Not available.

[To Top of page](#)



SECTION 12 : ECOLOGICAL INFORMATION H

Ecological Paragraph: None known

[To Top of page](#)



SECTION 13 : DISPOSAL CONSIDERATIONS H

Waste Disposal: Dispose according to EPA and local governmental regulations.

EPA Waste Number: Not applicable.

[To Top of page](#)



SECTION 14 : TRANSPORT INFORMATION H

DOT Shipping Name: (Not more than 1L) Amines, liquid, corrosive, n.o.s. (aminoethylpiperzine, triethylenetetramine)

DOT Hazard Class: 8

DOT Identification Number: UN2735

DOT Packing Group: II

DOT Exception: (Not more than 1L) Consumer Commodity ORM-D

IATA Shipping Name: Amines, liquid, corrosive, n.o.s. (aminoethylpiperzine, triethylenetetramine)

IATA UN Number: UN2735

IATA Packing Group: II

IATA Class: 8

Maritime Pollutant: None known

Comments: Exceptions: None.

[To Top of page](#)



SECTION 15 : REGULATORY INFORMATION H

Applies to all ingredients:

TSCA 8(b): Inventory Status: All components are listed on or are exempt from listing on the Toxic Substances Control Act Inventory.

TSCA 8(d): Manufacturer Health and Safety Data TSCA Section 12(b) annual: None. TSCA Section 12(b) one time: N-(2-aminoethyl)- 1,2-ethane diamine

Section 312 Hazard Category: Immediate health hazard, Delayed health hazard

Section 313 Toxic Release Form: None.

State: California Proposition 65: This product contains chemicals known to the state of California to cause cancer, birth defects, or other reproductive harm. (Lead).

Canada WHMIS: One or more components are not listed on or exempt from listing on the Canadian Domestic Substances List or have not been fully investigated. Contains a component(s) listed on the Non-Domestic Substances List.

[To Top of page](#)



SECTION 16 : ADDITIONAL INFORMATION H

HMIS:

Health Hazard: 3 *

Fire Hazard: 1

Reactivity: 0

Personal Protection: See Section 8.

NFPA:

Health: 3

Fire Hazard: 1

Reactivity: 0

Specific Hazard: Corrosive

MSDS Author: Safety, Health and Regulatory Affairs - North America

**View Section : 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16****SECTION 1: CHEMICAL PRODUCT and COMPANY IDENTIFICATION**

R

Product Name: FIXMASTER STEEL PUTTY RESIN
Manufacturer MSDS.: R
Manufacturer Name: Loctite Corporation
Address: 1001 Trout Brook Crossing
 Rocky Hill Connecticut 06067
Product Description: Epoxy resin

Business Fax: (860) 571-5465
Emergency Phone: (860) 571-5100
Health Phone: (860) 571-5100
Product Codes: R

HMIS

HEALTH	2
FIRE	1
REACTIVITY	0
PPE	

[To Top of page](#)**SECTION 2 : COMPOSITION, INFORMATION ON INGREDIENTS**

R

Ingredient Name	CAS#	Ingredient Percent
Aluminum flake EC Index Number: 1	7429-90-5	40-60 by Weight
Epoxy resin EC Index Number: 1	25068-38-6	30-40 by Weight
Neopentyl glycol diglycidyl ether EC Index Number: 1	17557-23-2	1-5 by Weight

[To Top of page](#)**SECTION 3 : HAZARDS IDENTIFICATION**

R

Signal Word: CAUTION! MAY CAUSE ALLERGIC SKIN REACTION. MAY BE HARMFUL IF SWALLOWED. MAY CAUSE EYE, SKIN, AND RESPIRATORY TRACT IRRITATION.
Physical State: Paste.
Color: Gray
Odor: Mild.

Applies to all ingredients:**Potential Health Effects:**

Eye Contact: Moderate eye irritation. edness. Excess tearing. Contact with epoxy resin at elevated temperatures may cause thermal burns. May cause eye injury.
Skin Contact: Allergic skin reaction. Itching. Moderate skin irritation. edness. Contact with epoxy resin at elevated temperatures may cause thermal burns.
Inhalation: Mild respiratory tract irritation. Coughing. High vapor concentrations are irritating to the eyes, nose, throat, and lungs. Dust may be a potential inhalation hazard.
Ingestion: May be harmful if swallowed. May irritate mouth, throat, and stomach if swallowed. Nausea.
Chronic Health Effects: Detailed information provided in section 11.
Aggravation of Pre-Existing Conditions: Skin disorders. Eye disorders. Skin allergies. Lung allergies.
Abbreviations Not applicable.

Aluminum flake :

OSHA Designation: No
NTP Designation: No
IARC Designation: No
Target Organs: Irritant. Lung. Central nervous system.

Epoxy resin :

OSHA Designation: No
NTP Designation: No
IARC Designation: No
Target Organs: Allergen. Irritant.

Neopentyl glycol diglycidyl ether :

OSHA Designation: No

NTP Designation: No
IARC Designation: No
Target Organs: Allergen. Irritant.

[To Top of page](#)



SECTION 4 : FIRST AID MEASURES

R

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

Skin Contact: Immediately flush skin with plenty of water (using soap, if available) for at least 15 minutes. Remove contaminated clothing and shoes. Wash clothing before reuse. Get medical attention if symptoms occur.

Inhalation: Remove to fresh air. If symptoms develop and persist, 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.

Note to Physicians: None.

[To Top of page](#)



SECTION 5 : FIRE FIGHTING MEASURES

R

Flash Point: CLOSED CUP : 300.F (149.C)

Flash Point Method: Tagliabue.

Extinguishing Media: In case of fire, use water spray (fog), foam, dry chemicals, or CO2.

Hazardous Combustion Byproducts: Oxides of carbon. Acids. Organic compounds. Phenolics. Irritating and toxic fumes. Aldehydes.

Fire Fighting Instructions: Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear. Use water to cool exposed containers. Water stream directed into fire may cause frothing with subsequent spread of flame.

Unusual Fire Hazards: Closed containers may rupture (due to build up of pressure) when exposed to extreme heat.

[To Top of page](#)



SECTION 6 : ACCIDENTAL RELEASE MEASURES

R

Leak Response: Scrape up as much material as possible. Clean residue with solvent or soap and water. Store in a closed container until disposal.

[To Top of page](#)



SECTION 7 : HANDLING and STORAGE

R

Handling: Do not swallow. Avoid contact with eyes. Avoid contact with skin and clothing. Wash thoroughly after handling.

Storage: Keep container tightly closed. Keep in a cool and well-ventilated area. For information on product shelf life, contact Loctite Customer Service at 1(800)243-4874

[To Top of page](#)



SECTION 8 : EXPOSURE CONTROLS, PERSONAL PROTECTION

R

Ventilation System: Not normally needed. Use local exhaust ventilation if the potential for airborne exposure exists.

Skin Protection Description: Use chemical resistant, impermeable gloves.

Eye/Face Protection: Chemical splash goggles or safety glasses with side shields.

Respiratory Protection: Use NIOSH approved respirator if there is potential to exceed any exposure limit(s). See Section 2 COMPOSITION/INFORMATION ON INGREDIENTS for exposure limits

Ingredient Guidelines

Ingredient: [Aluminum flake](#)

Guideline Information: TWA:10 mg/m3 ACGIH; TWA:5 mg/m3 OSHA respirable; TWA:15 mg/m3 OSHA total;

Ingredient: [Epoxy resin](#)

Guideline Information: Not established.;

Ingredient: [Neopentyl glycol diglycidyl ether](#)

Guideline Information: Not established.;

[To Top of page](#)



SECTION 9 : PHYSICAL and CHEMICAL PROPERTIES

R

Color: Gray

Odor: Mild.

Physical State: Paste.

pH: Not applicable.

Vapor Pressure: Not applicable.

Vapor Density: >1 (Air 1)

Boiling Point: Not applicable.

Solubility in Water: Insoluble

Specific Gravity: 1.7152

Evaporation Point: <1 compared to Butyl acetate.

Volatile Organic Compound Content: Not available.

**SECTION 10 : STABILITY and REACTIVITY**

R

Chemical Stability:	Stable.
Conditions to Avoid:	None known
Incompatibilities with Other Materials:	Strong oxidizing agents. Strong Lewis acids. Strong mineral acids. Strong mineral bases. Strong organic bases, especially primary and secondary aliphatic amines. Mercaptans
Hazardous Polymerization:	Will not occur.
Hazardous Decomposition Products:	None known

[To Top of page](#)**SECTION 11 : TOXICOLOGICAL INFORMATION**

R

Toxicological Paragraph:	Not available.
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[To Top of page](#)**SECTION 12 : ECOLOGICAL INFORMATION**

R

Ecological Paragraph:	None known
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[To Top of page](#)**SECTION 13 : DISPOSAL CONSIDERATIONS**

R

Waste Disposal:	Dispose according to EPA and local governmental regulations.
EPA Waste Number:	Not hazardous.

[To Top of page](#)**SECTION 14 : TRANSPORT INFORMATION**

R

DOT Exception:	Not applicable.
Maritime Pollutant:	None known
Comments:	Exceptions: Not applicable.

[To Top of page](#)**SECTION 15 : REGULATORY INFORMATION**

R

Applies to all ingredients:

TSCA 8(b): Inventory Status: All components are listed on or are exempt from listing on the Toxic Substances Control Act Inventory.

TSCA 8(d): Manufacturer Health and Safety Data TSCA Section 12(b) annual: None. TSCA Section 12(b) one time: None.

Section 312 Hazard Category: Immediate health hazard, Delayed health hazard

Section 313 Toxic Release Form: Aluminum flake

State: California Proposition 65: This product contains chemicals known to the state of California to cause cancer, birth defects, or other reproductive harm. (Nickel, Phenyl glycidyl ether, Epichlorohydrin, Toluene).

Canada WHMIS: All components are listed on or are exempt from listing on the Canadian Domestic Substances List.

[To Top of page](#)**SECTION 16 : ADDITIONAL INFORMATION**

R

HMIS:	
Health Hazard:	2 *
Fire Hazard:	1
Reactivity:	0
Personal Protection:	See Section 8.
NFPA:	
Health:	2
Fire Hazard:	1
Reactivity:	0
Specific Hazard:	None
MSDS Author:	Safety, Health and Regulatory Affairs - North America

