02/19/08 Rev 04/30/08

HENKEL CORPORATION

AVON, OH 44011

TELEPHONE: (440) 937-7000

MATERIAL SAFETY DATA SHEET Page 01 of 06

Loctite Epoxy Gel IDH No. 303419

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Loctite Epoxy Gel

Product Type: Epoxy

2. COMPOSITION, INFORMATION ON INGREDIENTS

Ingredients RESIN	CAS No.	00
Epoxy resin	Proprietary	60-100
Silica, amorphous, fumed, Crystalline-free	112945-52-5	1-5
HARDENER		
Pentaerythritol-PO-mercaptoglycerol	72244-98-5	60-100
N-(2-Aminoethyl)piperazine	140-31-8	5-10
Phenol, 2,4,6-tris[(dimethylamino)methyl]	90-72-2	5-10
Silica, amorphous, fumed, Crystalline-free	112945-52-5	5-10
Aliphatic amines	Proprietary	1-5

Ingredients which have exposure limits

Exposure Limits (TWA) Ingredients	ACGIH (TLV)	OSHA (PEL)	OTHER
Silica, amorphous, fumed, Crystalline-free	6mg/m³ TWA	10mg/m ³ TWA	3mg/m³ TWA Respirable Dust

AVON, OH 44011

TELEPHONE: (440) 937-7000

MATERIAL SAFETY DATA SHEET Page 02 of 06

Product Name: Loctite Epoxy Gel

3. HAZARDS IDENTIFICATION

Toxicity: Causes eye and skin burns.

May cause allergic skin and respiratory reaction.

May cause respiratory tract irritation. May be harmful if absorbed through skin.

May be harmful is swallowed. May cause burns of mouth and

throat.

Primary Routes of Entry: Ingestion, skin, inhalation, eye contact

Signs and Symptoms

of Exposure: Eye or skin irritation or injury. Allergic

responses such as sensitization or dermatitis.

Existing Conditions

Aggravated by Exposure: Skin disorders. Skin allergies. Respiratory disorders.

Eye disorders. Asthma

	Literature Referenced	Car	cinog	en
Ingredients	Target Organ and Other Health Effects	NTP	IARC	OSHA
Epoxy resins	ALG IRR	NO	NO	NO
Polymercaptan hardener	No data	NO	NO	NO
N-(2-Aminoethyl)piperaz	ine IRR	NO	NO	NO
Triethylenetetramine	ALG IRR MUT	NO	NO	NO
Phenol, 2,4,6-tris[
(dimethylamino)methyl] ALG IRR	NO	No	NO
Aminoethylethanolamine	ALL IRR	NO	NO	NO
Silica	Nuisance dust	NO	NO	NO
Heptakis(dipropylenegly	col)- No data	NO	NO	NO
triphosphate				
Diethylene triamine	ALG EYE IRR	NO	NO	NO
Hydroxyethylpiperazine	ALG CNS IRR	NO	NO	NO
Nonylphenol	ALG COR IRR KID	NO	NO	NO

Abbreviations

ALG	Allergen	BLO	Blood
COR	Corrosive	EYE	Eyes
IRR	Irritant	KID	Kidney
NR	No Records	SPL	Spleen

MUT Mutagen CNS Central Nervous System

AVON, OH 44011

TELEPHONE: (440) 937-7000

MATERIAL SAFETY DATA SHEET Page 03 of 06

Product Name: Loctite Epoxy Gel

4. FIRST AID MEASURES

Ingestion: Do not induce vomiting. Keep individual calm.

Obtain medical attention.

Inhalation: Remove to fresh air. If symptoms persist, obtain medical

attention.

Skin Contact: Wash immediately with soap and water. Do not use

solvents for cleaning skin. Get medical attention if

symptoms occur.

Eye Contact: Immediately flush eyes with water for 15 minutes and get

medical attention.

5. FIRE FIGHTING MEASURES

Flash Point: More than 93 °C (200°F) Method: Tag Closed Cup

Extinguishing Media:

Water spray (fog), carbon dioxide, foam, dry chemical

Special Firefighting

Procedures: Wear self-contained breathing apparatus and full

protective clothing, such as turn-out gear.

Hazardous combustion

Explosion Hazards:

products: Unusual Fire or

Oxides of carbon. Irritating organic fragments.

In the event of fire, cool tanks with water spray. Closed containers may rupture (due to build up of

pressure) when exposed to extreme heat.

Autoignition temperature: Not available

Explosive Limits:

(% by volume in air)Lower Not available (% by volume in air)Upper Not available

6. ACCIDENTAL RELEASE MEASURES

Steps to be taken in case

of spill or leak: Remove all ignition sources. Immediately contact

emergency personnel. Scrape up material. Clean residue with soap and water. Store in a closed container until

ready for disposal.

Environmental precautions: Prevent product from entering drains or open waters.

7. HANDLING AND STORAGE

Handling: Keep away from heat, spark and flame. Do not breathe mist or

vapors. Keep container closed. Avoid contact with eyes, skin

and clothing. Wash thoroughly after handling.

Storage: Store at or below 100°F. 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.

AVON, OH 44011

TELEPHONE: (440) 937-7000

MATERIAL SAFETY DATA SHEET Page 04 of 06

Product Name: Loctite Epoxy Gel

8. EXPOSURE CONTROLS, PERSONAL PROTECTION

Eyes: Safety glasses with side shields or goggles. Skin: Chemical resistant, impermeable gloves. Ventilation: Sufficient to maintain vapor concentration

below TLV.

Respiratory protection: Use a NIOSH approved air-purifying respirator if the

potential to exceed established exposure limits exists.

See Section 2 for Exposure Limits.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid

Color: Hardener: Opaque Resin: translucent clear

Odor: Mild

Boiling Point: More than 300°F pH: Not Applicable Solubility in Water: Slightly soluble

Specific Gravity Resin 1.12, Hardener 1.04

Volatile Organic Compound

0.113% Resin and Hardener together Less than 5mm Hg at $20\,^{\circ}\text{C}$ (68°F)

Vapor Pressure: Less than 5mm Vapor Density: Not available

Evaporation Rate

(Ether = 1) Not Available

VOC Content: 0.113% (value for resin and hardener together)

10. STABILITY AND REACTIVITY

Stability: Stable

Hazardous Polymerization: Will not occur

Incompatibility: Strong oxidizers, acids, Halogonated compounds. Strong

mineral acids. Reactive materials. Calcium

hypochlorite. Sodium hypochlorite. Nitrous acid and

other nitrosating agents. Mercaptans.

Conditions to Avoid: Excessive heat. Storage with incompatible materials.

11. TOXICOLOGICAL INFORMATION

See Section 3.

12. ECOLOGICAL INFORMATION

No data available

13. DISPOSAL CONSIDERATIONS

Recommended methods of

disposal: Dispose according to EPA and local regulations.

EPA Hazardous Waste

Number Not a RCRA hazardous waste.

AVON, OH 44011

TELEPHONE: (440) 937-7000

MATERIAL SAFETY DATA SHEET Page 05 of 06

Product Name: Loctite Epoxy Gel

14. TRANSPORTATION INFORMATION

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

All shipping descriptions result from components in hardener. Resin is not regulated.

DOT (49 CFR) Domestic Ground Transport:

Proper Shipping Name: Corrosive liquid, basic, organic, n.o.s.

(triethylenetetramine/aminoehtylpiperazine)

Hazard class: 8
UN No.: UN3267
Packing Group: II

Exceptions: (Not more than 1L) Consumer Commodity, ORM-D

International Air Transportation (ICAO/IATA):

Proper Shipping Name: Corrosive liquid, basic, organic, n.o.s.

(triethylenetetramine/aminoehtylpiperazine)

Hazard class: 8
UN No.: UN3267
Packing Group: II

Water Transportation (IMO/IMDG):

Proper Shipping Name: Corrosive liquid, basic, organic, n.o.s.

(triethylenetetramine/aminoethylpiperazine)

Class or Division: Class 8
Packing Group: II
UN or ID Number: UN 3267
Marine Pollutant: None known

15. REGULATORY INFORMATION

<u>United States</u>

TSCA 8(b) Inventory

Status: All components are listed or exempt from listing on the

Toxic Substances Control Act Inventory.

TSCA 12(b) Export

Notification: None.

CERCLA/SARA 302: None above reporting de minimus.

CERCLA/SARA 311/312: Immediate Health Hazard

CERCLA/SARA 313: None above reporting de minimus.

CA Proposition 65: This product contains a chemical known to the State of

(Hardener) California to cause cancer.

HENKEL CORPORATION 02/19/08 Rev 04/30/08

AVON, OH 44011

TELEPHONE: (440) 937-7000

MATERIAL SAFETY DATA SHEET Page 06 of 06

Product Name: Loctite Epoxy Gel

15. REGULATORY INFORMATION (continued)

Canada

CEPA DSL/NDSL Status: All components are listed on or are exempt from listing

on the Domestic Substances List.

WHMIS hazard class: D.2.B (Resin) E, D.2.A, D.2.B (Hardener)

16. OTHER INFORMATION

HMIS(R) Code:

Health Hazard: 3
Flammability Hazard: 1
Reactivity Hazards: 1

Personal Protection: See Section 8.

HMIS is a registered trademark of the National Paint and Coatings Assn.

Prepared by:

Company: Henkel Corporation

Regulatory Affairs (440) 937-7000