



MATERIALS SAFETY DATA SHEET

Date Revised Oct 03, 2012 5th Edition

FOR CHEMICAL EMERGENCY

During Business Hours: (800) 966-3458

Outside Business Hours: (800) 420-7186

1. IDENTIFICATION OF THE PRODUCT

PRODUCT NAME: Gorilla Epoxy - Hardener

SYNONYMS: Epoxy Hardener

DISTRIBUTOR: The Gorilla Glue Company
4550 Red Bank Expressway
Cincinnati, OH 45227
Tel: (513) 271-3300
Fax: (513) 527-3742

2. HAZARDS IDENTIFICATION

Physical State Liquid
Color Amber

OSHA/HCS status This material is considered hazardous by OSHA Hazard Communication Standard (29 CFR 1910.1200)

Emergency Overview DANGER!
CAUSES EYE AND SKIN BURNS. CAUSES RESPIRATORY TRACT IRRITATION. MAY CAUSE ALLERGIC SKIN REACTION. MAY BE HARMFUL IF ABSORBED THROUGH SKIN OR SWALLOWED. CAN ENTER LUNGS AND CAUSE DAMAGE.
Do not breathe vapor. Do not get on skin. Avoid contact with eyes. Do not ingest. Wash thoroughly after handling. Use only with adequate ventilation.

See toxicological information (section 11)

3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>INGREDIENTS</u>	<u>WGT%</u>	<u>CAS #</u>
Mercaptan-terminated polymer	60-100%	101359-87-9
Isophorone	7-13 %	2855-13-2

4. FIRST AID MEASURES

Eye contact Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.

Skin contact In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.

Inhalation Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.



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4. FIRST AID MEASURES

Ingestion

Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Notes to physician

No specific treatment. Treat symptomatically. Call medical doctor or poison control center immediately if large quantities have been ingested.

5. FIRE- FIGHTING MEASURES

Flash point

Closed cup: >93°C (>199.4°F)

Hazardous thermal decomposition products

Decomposition products may include the following:
carbon dioxide
carbon monoxide
nitrogen oxides

Extinguishing media

Suitable :

Use an extinguishing agent suitable for the surrounding fire.

Not suitable :

None known

Special exposure hazards

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions :

Use personal protection in Section 8.

Environmental precautions :

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Methods for cleaning up :

Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Note: see section 1 for emergency contact information and section 13 for waste disposal.



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7. HANDLING AND STORAGE

Handling Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Keep tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Storage Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Do not store in unlabeled containers.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls: Use local exhaust ventilation if the potential for airborne exposure exists.

Respiratory: In case of inadequate ventilation wear respiratory protection.

Hands: Chemical resistant, impermeable gloves

Eyes: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary.

9. PHYSICAL AND CHEMICAL PROPERTIES

FLASH POINT: >200°F/ 93°C Closed cup

LOWER FLAMMABLE LIMIT %: Not available

UPPER FLAMMABLE LIMIT %: Not available

APPEARANCE: Amber viscous liquid

SPECIFIC GRAVITY: 1.11

VAPOR PRESSURE (mmHg): < 1

BOILING POINT: N/AV

VAPOR DENSITY: Heavier than air

EVAPORATION RATE (Ethyl Ether = 1): Not available

VOLATILES BY WEIGHT: Nil

SOLUBILITY IN WATER: Nil

VOC: 1.2% (11 g/L)

10. STABILITY AND REACTIVITY

STABILITY: Stable

CONDITIONS TO AVOID: Open flames, sparks, heat, electrical and static discharge.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon Dioxide, Carbon Monoxide, and Carbon.

HAZARDOUS POLYMERIZATION: Under normal conditions of storage and use, hazardous reactions will not occur.



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11. TOXICOLOGICAL INFORMATION

Potential Acute Health Effects:

Inhalation

Causes irritation to the respiratory system

Ingestion

Harmful if swallowed. Aspiration hazard if swallowed. Can enter lungs and cause damage. May cause burns to mouth, throat and stomach.

Skin

Corrosive to skin. Can cause burns. May cause sensitization by skin contact.

Eyes

Corrosive to eye. Can cause burns.

Product/Ingredient name	Result	Species	Dose	Exposure
Isophorone diamine	LD50 Oral	Rat	1030mg/kg	-
	Sensitizer	Guinea Pig		Skin
Mercaptan-terminated polymer	LC50 Inhalation	Rat	>20 mg/L	4 hours

Chronic Effects:

Overexposure to this material has apparently been known to cause the following effects in lab animals: skin sensitization, respiratory system irritation.

CARCINOGEN: YES NO

TERATOGEN: YES NO

MUTAGEN: YES NO

12. ECOLOGICAL INFORMATION

Environmental effects

No known significant effects or critical hazards.

13. DISPOSAL CONSIDERATIONS

Waste Disposal: Dispose of in accordance with local, state, and federal regulations.

14. TRANSPORT INFORMATION

Proper shipping name

DOT : ISOPHORONEDIAMINE MIXTURE UN2289

TDG : ISOPHORONEDIAMINE MIXTURE UN2289

IMDG : ISOPHORONEDIAMINE MIXTURE UN2289

IATA : ISOPHORONEDIAMINE MIXTURE UN2289 Cargo aircraft qty limit 60L, packaging instructions 856

15. REGULATORY INFORMATION

U.S. Federal Regulations

HCS Classification

Corrosive material

Sensitizing material

U.S. Federal regulations

United States Inventory (TSCA 8b): All components are listed or exempted.

SARA 302/304/311/312/313

Extremely hazardous substances: No ingredient listed



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15. REGULATORY INFORMATION

SARA 311/312 Hazard identification: Immediate acute health hazard, Delayed chronic health hazard

Clean Air Act Section 112(b) No ingredients listed

CERCLA Hazardous substances No ingredients listed

State Regulations:

Pennsylvania – RTK: Proponal, Oxybis-

California Prop 65: This product contains no listed substances known to the state of California to cause cancer, birth defects or other reproductive harm, at levels which would require a warning under the statute.

Canada
WHMIS Class D-2B: Material causing other toxic effects.
Class E: Corrosive Material

CEPA DSL All components are listed or exempted.

International lists :
Australia inventory (AICS): At least one component is not listed.
China inventory (IECSC): All components are listed or exempted.
Japan inventory: At least one component is not listed.
Korea inventory: Not determined.
New Zealand Inventory of Chemicals (NZIoC): Not determined.
Philippines inventory (PICCS): At least one component is not listed.

16. OTHER INFORMATION

HMIS RATING: Health 3 4 = Extreme
Fire 1 3 = High
Reactivity 1 2 = Moderate
1 = Slight
0 = Insignificant

Personal Protection - See Section 8

The information presented in this Material Safety Data Sheet was prepared by qualified personnel and to the best of our knowledge is true and accurate. The information and recommendations are furnished for this product with the understanding that the purchaser will independently determine the suitability of the product for this purpose. This data does not constitute a warranty, expressed or implied, statutory or otherwise, nor is it representation for which The Gorilla Glue Company assumes legal responsibility. The data is submitted for the user's information and consideration only. Any use of this product must be determined by the user to be in accordance with applicable federal, state, provincial and local laws and regulations.



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1. IDENTIFICATION OF THE PRODUCT

PRODUCT NAME: Gorilla Epoxy - Resin

SYNONYMS: Epoxy Resin

DISTRIBUTOR: The Gorilla Glue Company
4550 Red Bank Expressway
Cincinnati, OH 45227
Tel: (513) 271-3300
Fax: (513) 527-3742

2. HAZARDS IDENTIFICATION

OVEREXPOSURE EFFECTS:

ACUTE EFFECTS:

EYES: Contact with eyes can cause severe irritation, possible irreparable eye damage.

SKIN: Contact with skin can cause irritation, (minor itching, burning and/or redness), Dermatitis, defatting may be readily absorbed through the skin.

INHALATION: Inhalation of vapors can cause nasal and respiratory irritation, dizziness, weakness, fatigue, nausea, headache, possible unconsciousness and/or asphyxiation. Aspiration of material into lungs may result in chemical pneumonitis which can be fatal.

INGESTION: Ingestion can cause gastrointestinal irritation, nausea, vomiting, diarrhea.

PRIMARY ROUTES OF EXPOSURE: skin, inhalation

3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>INGREDIENTS</u>	<u>WGT %</u>	<u>CAS #</u>
Epoxy Resin	80-90%	25068-38-6
Modified Epoxy Resin	5-15%	Supplier Trade Secret
Alkyl Glycidyl Ether	5-15%	68609-97-2

4. FIRST AID MEASURES

INHALATION: If inhaled, remove victim from exposure to a well-ventilated area. Make them comfortably warm, but not hot. Use oxygen or artificial respiration as required. Consult a physician.

SKIN: For skin contact, wash promptly with soap and excess water.

EYES: For eye contact, flush promptly with excess water for at least fifteen minutes. Consult a physician.

INGESTION: If ingested, do not induce vomiting. Give victim a glass of water. Call a physician immediately.



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5. FIRE- FIGHTING MEASURES

FIRE EXTINGUISHING MEDIA: Carbon Dioxide, Dry Chemical, Foam

SPECIAL FIRE FIGHTING PROCEDURES: Fight like a fuel oil fire. Cool fire exposed containers with water spray. Firefighter should wear OSHA/NIOSH approved self-contained breathing apparatus.

UNUSUAL FIRE AND EXPLOSION HAZARD: Closed containers exposed to high temperatures, such as fire conditions may rupture.

6. ACCIDENTAL RELEASE MEASURES

SPILLS, LEAK OR RELEASE: Ventilate area. Remove all possible sources of ignition. Avoid prolonged breathing of vapor. Contain spill with absorbent.

7. HANDLING AND STORAGE

STORAGE AND HANDLING: Use with adequate ventilation. Avoid contact with eyes and skin. Avoid breathing vapors. Do not store the product above 100°F/38°C. Do not flame, cut, braze weld or melt empty containers. Keep the product away from heat, open flame, and other sources of ignition. Avoid contact with strong acids, alkalis, and oxidizers.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

INGREDIENTS

CAS

TLV

Epoxy Resin	25068-38-6	N/E
Modified Epoxy Resin	Supplier Trade Secret	N/E
Alkyl Glycidyl Ether	68609-97-2	N/E

RESPIRATORY PROTECTION: If component TLV limits are exceeded, use NIOSH/MSHA approved respirator to remove vapors. Use an air-supplied respirator if necessary. With general room ventilation, does not require a respirator.

VENTILATION: Use adequate ventilation in volume and pattern to keep TLV/PEL below recommended levels.

Explosion-proof ventilation may be necessary.

PROTECTIVE GLOVES: To prevent prolonged exposure use rubber gloves; solvents may be absorbed through the skin.

EYE PROTECTION: Safety Glasses or goggles with splash guards or side shields.

OTHER PROTECTIVE EQUIPMENT: Wear protective clothing as required to prevent skin contact.



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9. PHYSICAL AND CHEMICAL PROPERTIES

FLASH POINT: >200°F/ 93°C Seta Flash Closed cup

LOWER FLAMMABLE LIMIT %: N/E

UPPER FLAMMABLE LIMIT %: N/E

APPEARANCE: Clear viscous liquid

SPECIFIC GRAVITY: 1.14

VAPOR PRESSURE (mmHg): < 1

BOILING POINT: N/AV

VAPOR DENSITY: Heavier than air

EVAPORATION RATE (Ethyl Ether = 1): Slower than Ethyl Ether

VOLATILES BY WEIGHT: Nil

SOLUBILITY IN WATER: Nil

VOC: Grams/Liter = Nil

Lbs/Gallon = Nil

10. STABILITY AND REACTIVITY

STABILITY: Stable

CONDITIONS TO AVOID: Open flames, sparks, heat, electrical and static discharge.

INCOMPATIBILITY MATERIALS TO AVOID: Strong acids, alkalis, oxidizers.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon Dioxide, Carbon Monoxide, and Carbon.

HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

CHRONIC EFFECTS:

Overexposure to this material has apparently been known to cause the following effects in lab animals: skin sensitization, respiratory system irritation.

CARCINOGEN: YES NO

TERATOGEN: YES NO

MUTAGEN: YES NO

12. ECOLOGICAL INFORMATION

NOT A MARINE POLLUTANT

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL: Dispose of in accordance with local, state, and federal regulations.

14. TRANSPORT INFORMATION

For Ground Transport: In USA

Not Regulated

For Air Transport:

Not Regulated

For Ocean Transport:

Not Regulated



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15. REGULATORY INFORMATION

CALIFORNIA PROPOSITION 65:

Trace amounts of epichlorohydrin, a chemical known to the State of California to cause cancer, is present in this product. However, given the low level and application of this product, typical uses do not constitute a significant risk under the standard.

SECTION 313 SUPPLIER NOTIFICATION:

This product contains the following toxic chemicals subject to the reporting requirements of the Emergency Planning and Community Right-To-Know Act of 1986 and 40 CFR 372:

<u>CHEMICAL NAME</u>	<u>CAS</u>	<u>% BY WGT</u>
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N/AP

This information must be included in all MSDS that are copied and distributed for this chemical.

16. OTHER INFORMATION

HMIS RATING:	Health	2	4 = Extreme
	Fire	1	3 = High
	Reactivity	0	2 = Moderate
			1 = Slight
			0 = Insignificant

Personal Protection - See Section 8

ABBREVIATIONS

IARC = International Agency for Research on Cancer
ACGIH = American Conference of Governmental Industrial Hygienists
NIOSH = National Institute of Occupational Safety and Health
TLV = Threshold Limit Value
PEL = Permissible Emission Level
DOT = Department of Transportation
NTP = National Toxicology Program
N/AV = Not Available
N/AP = Not Applicable
N/E = Not Established
N/D = Not Determined

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