

Safety Data Sheet

LUCID Epoxy- Hardener

Revision date: 14/08/2021

1. Identification

Product identifier used on the label

LUCID Epoxy- Hardener

Recommended use of the chemical and restriction on use: Epoxy Hardener

* The "Recommended use" identified for this product is provided solely to comply with a Federal requirement and is not part of the seller's published specification. The terms of this Safety Data Sheet (SDS) do not create or infer any warranty, express or implied, including by incorporation into or reference in the seller's sales agreement.

Details of the supplier of the safety data sheet

Company:

LUCID GRIP LLC

27122 Paseo Espada Ste A903, SJC , CA 92675

info@lucidgrip.com

Emergency telephone number

CHEMTREC: 1-800-424-9300

Other means of identification

Chemical family: mixed amine

Synonyms: mixed amine

2. Hazards Identification

According to Regulation 2012 OSHA Hazard Communication Standard: 29 CFR Part 1910.1200

Classification of the product

Acute Tox.	4 (oral)	Acute toxicity
Skin Corr./Irrit.	1B	Skin corrosion/irritation
Eye Dam./Irrit	1	Serious eye damage/eye irritation
Reproductive Toxicity	2	Reproductive Toxicity
Aquatic Acute	2	Hazardous to the aquatic environment
Aquatic Chronic	2	Hazardous to the aquatic environment

Pictogram:



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Signal Word: Danger

Hazard Statement:

H302 Harmful if swallowed
H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.
H361 Suspected of damaging fertility or the unborn child.
H411 Very toxic to aquatic life with long lasting effects

Precautionary Statements(Prevention):

Do not handle until all safety precautions have been read and understood
Wear protective gloves/protective clothing/ eye protection/face protection.
Avoid release to the environment.
Do not eat, drink, or smoke when using this product.
Wash skin thoroughly after handling.
Use personal protective equipment as required.

Precautionary Statements(Response):

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth. Do NOT induce vomiting.
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash with plenty of soap and water. Take off contaminated clothing and wash before reuse.
Absorb spillage to prevent material damage.

Precautionary Statements (Storage):

Store locked up.

Precautionary Statements (Disposal):

Dispose of contents/container to hazardous or special waste collection point.

Hazards not otherwise classified - None

3. Composition / Information on Ingredients

According to Regulation 2012 OSHA Hazard Communication Standard: 29 CFR Part 1910.1200

<u>Chemical name</u>	<u>CAS Number</u>	<u>Content (W/W)</u>
Trimethylolpropane tris[poly(propylene glycol), amine terminated] ether	39423-51-3	> 20 %
4-Nonylphenol, branched	84852-15-3	> 25 %
Proprietary		< 20 %

4. First-Aid Measures

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Description of first aid measures

General advice:

Consult a physician. Show this safety data sheet to the doctor in attendance. First aid personnel should pay attention to their own safety. If the patient is likely to become unconscious, place and transport in stable sideways position (recovery position). Immediately remove contaminated clothing.

If inhaled:

Keep patient calm, remove to fresh air, seek medical attention. Immediately administer a corticosteroid from a controlled/metered dose inhaler.

If on skin:

Immediately wash thoroughly with plenty of water, apply sterile dressings, consult a skin specialist.

If in eyes:

Immediately wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eyespecialist.

If swallowed:

Immediately rinse mouth and then drink 200-300 ml of water, seek medical attention.

Most important symptoms and effects, both acute and delayed: The most important known symptoms and effects are described in the labelling. (see section 2 and 11)

Indication of any immediate medical attention and special treatment needed: No data available.

Note to physician

Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

5. FIREFIGHTING MEASURES

Extinguishing media

Suitable extinguishing media:

Water spray, dry powder, carbon dioxide, foam

Special hazards arising from the substance or mixture

Hazards during fire-fighting: No particular hazards known.

Advice for firefighters

Protective equipment for fire-fighting:

Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

Further information:

Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

Impact Sensitivity:

Remarks: No data available.

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6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapors, mist, or gas. Use personal protective clothing. Ensure adequate ventilation.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

Methods and material for containment and cleaning up

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

7. Handling and Storage

Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Containers should be opened carefully in well-ventilated areas to avoid static discharge.

Protection against fire and explosion:
Take precautionary measures against static discharges.

Conditions for safe storage, including any incompatibilities

Segregate from acids and acid forming substances.

Further information on storage conditions: Containers should be stored tightly sealed in a dry place. Keep container tightly closed and in a well-ventilated place. Keep away from sources of ignition - No smoking. Keep container tightly closed.

Storage stability:
Keep container dry because product takes up the humidity of air.

8. Exposure Controls/Personal Protection

Components with workplace control parameters

Contains no substances with established exposure limit values.

Personal protective equipment

Respiratory protection:

Do not breathe dust/fume/gas/mist/vapors/spray. If engineering controls do not maintain airborne concentrations to an acceptable level, an approved respirator must be worn. Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multipurpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection:

Chemical resistant protective gloves.

Eye protection:

Wear face shield or tightly fitting safety goggles (chemical goggles) if splashing hazard exists.

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Body protection:

Body protection must be chosen depending on activity and possible exposure, e.g. head protection, apron, protective boots, chemical-protection suit.

General safety and hygiene measures:

Eye wash fountains and safety showers must be easily accessible. Wear protective clothing as necessary to prevent contact. Gloves must be inspected regularly and prior to each use. Replace if necessary (e.g. pinhole leaks). Hands and/or face should be washed before breaks and at the end of the shift. When using, do not eat, drink or smoke. Remove contaminated clothing.

9. Physical and Chemical Properties

Form:	liquid
Odor:	amine-like
Color:	Clear to yellowish
pH value:	12 (100 g/l)
Melting point:	< -10 °C
Boiling point:	> 250 °C
Flash point:	> 150 °C (ASTM D93)
Flammability:	not flammable (other)
Lower explosion limit:	For liquids not relevant for classification and labelling. The lower explosion point may be 5 - 15 °C below the flash point.
Upper explosion limit:	For liquids not relevant for classification and labelling.
Autoignition:	> 200 °C
Vapor pressure:	1.6 mbar (20 °C) 10.5 mbar (55 °C)
Density:	0.987 g/cm ³ (20 °C)
Thermal decomposition:	315 °C, > 340 kJ/kg (DSC (DIN 51007)) Thermal decomposition above the indicated temperature is possible. self-accelerating reaction
Viscosity, dynamic:	1500 – 2000 CPS
Solubility in water:	Not very soluble [<1%]
Evaporation rate:	< Ether.

10. Stability and Reactivity

Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

Corrosion to metals: Corrosive effect on metals.

Chemical stability

The product is stable if stored and handled as prescribed/indicated.

Possibility of hazardous reactions

The product is chemically stable.

Conditions to avoid

No conditions known that should be avoided.

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Incompatible materials

Acids, oxidizing agents

Hazardous decomposition products

Decomposition products:

Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

Thermal decomposition: 145 °C (DSC (DIN51007))

315 °C (DSC (DIN51007))

Thermal decomposition above the indicated temperature is possible. self-accelerating reaction

11. Toxicological information

For Polyetheramine:

Primary routes of exposure

Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

Acute Toxicity/Effects

Acute toxicity

Assessment of acute toxicity: Of moderate toxicity after single ingestion. Of moderate toxicity after short-term skin contact. The inhalation of a highly enriched/saturated vapor-air-mixture represents an unlikely acute hazard.

Oral

Type of value: LD50

Species: rat

(female)

Value: > 550 - < 2,000 mg/kg (OECD Guideline 425)

Inhalation

Type of value: LCD

Species: rat

Value: 113 mg/l {IRT}

Exposure time: 8 h

The vapour was tested.

No mortality within the stated exposition time as shown in animal studies.

Dermal

Type of value: LD50 Species: rat

Value: > 1,000 mg/kg (OECD Guideline 402)

Assessment other acute

effects Assessment of STOT

single:

Based on the available information there is no specific target organ toxicity to be expected after a single exposure.

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Irritation/ corrosion

Assessment of irritating effects: May cause slight irritation to the skin. May cause severe damage to the eyes.

Skin

Species: rabbit
Result: Slightly irritating.
Method: OECD Guideline 404

Eye

Species: In vitro assay
Result: Risk of serious damage to eyes. Method: HET-CAM test in vitro

Sensitization

Assessment of sensitization: Skin sensitizing effects were not observed in animal studies.

Buehler test

Species: guinea
pig
Result: Non-sensitizing.
Method: similar to OECD guideline 406

Aspiration Hazard

No aspiration hazard expected.

Chronic Toxicity/Effects

Repeated dose toxicity

Assessment of repeated dose toxicity: No adverse effects were observed after repeated dermal exposure in animal studies. After repeated exposure the prominent effect is local irritation.

Genetic toxicity

Assessment of mutagenicity: The substance was not mutagenic in bacteria. The substance was not mutagenic in mammalian cell culture. The substance was not mutagenic in studies with mammals.

Carcinogenicity

Assessment of carcinogenicity: No data available.

Reproductive toxicity

Assessment of reproduction toxicity: The results of animal studies gave no indication of a fertility impairing effect. The results were determined in a Screening test (OECD 421/422).

Teratogenicity

Assessment of teratogenicity: In animal studies the substance did not cause malformations. The results were determined in a Screening test (OECD 421/422).

Symptoms of Exposure

Medical conditions aggravated by overexposure

Data available do not indicate that there are medical conditions that are generally recognized as being aggravated by exposure to this substance/product.

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For Nonyl-Phenol

Acute toxicity

LD50 Oral-Rat-male and female-1,412 mg/kg

Inhalation: No data available

Dermal: No data available

Skin corrosion/irritation

Skin-Rabbit

Result: Causes burns.-4 h

(OECD Test Guideline 404)

Serious eye damage/eye irritation

Eyes-Rabbit

Result: Corrosive-72 h

(OECD Test Guideline 405)

Respiratory or skin sensitisation

Maximisation Test (GPMT)-Guinea pig

Result: Does not cause skin sensitisation.

(OECD Test Guideline 406)

Germ cell mutagenicity

No data available

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity

Suspected human reproductive toxicant

Reproductive toxicity-Rat-Oral

Effects on Newborn: Growth statistics (e.g., reduced weight gain). Effects on Newborn: Physical.

Suspected human reproductive toxicant

Specific target organ toxicity-single exposure

No data available

Specific target organ toxicity-repeated exposure

No data available

Aspiration hazard

No data available

Additional Information

Repeated dose toxicity-Rat-male and female-No observed adverse effect level-10 mg/kg-Lowest observed adverse effect level-50 mg/kg

RTECS: Not available

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Cough, Shortness of breath, Headache, Nausea, Vomiting, To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

12. Ecological Information

Toxicity

Aquatic toxicity

Assessment of aquatic toxicity:

Acutely harmful for aquatic organisms. The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Toxicity to fish

LC50 (96 h) > 100 mg/l, *Oncorhynchus mykiss* (OECD 203; ISO 7346; 84/449/EEC, C.1) The details of the toxic effect relate to the nominal concentration.

Aquatic invertebrates

EC50 (48 h) 13.0 mg/l, *Daphnia magna* (OECD Guideline 202, part 1, static) Nominal values (confirmed by concentration control analytics)

Aquatic plants

EC50 (72 h) 4.4 mg/l (growth rate), *Pseudokirchneriella subcapitata* (OECD Guideline 201)

The details of the toxic effect relate to the nominal concentration. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

No observed effect concentration 1 mg/l (growth rate), *Pseudokirchneriella subcapitata* (OECD Guideline 201)

The details of the toxic effect relate to the nominal concentration. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition

Microorganisms/Effect on activated sludge

Toxicity to microorganisms OECD Guideline 209 aerobic activated sludge, domestic/EC20 (30 min): approx. 130 mg/l. The details of the toxic effect relate to the nominal concentration.

Persistence and degradability

Assessment biodegradation and elimination (H2O)

Not readily biodegradable (by OECD criteria). Poorly biodegradable. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Elimination information

< 10 % DOC reduction (28 d) (OECD 301 A (new version)) (aerobic, activated sludge, domestic). The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Bioaccumulative potential

Bioaccumulation potential

Because of the n-octanol/water distribution coefficient (log Pow) accumulation in organisms is not to be expected.

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Ecotoxicological data

Components Test Results

PARA-NONYLPHENOL (84852-15-3)

EC50 Daphnia: 0.035 mg/l 48 hours

LC50 Algae: 0.0563 mg/l 72 hours

LC50 Fathead minnow (Pimephales promelas): 0.1383 mg/l 96 hours

LC50 Rainbow trout, donaldson trout (Oncorhynchus mykiss):

0.14 - 0.23 mg/l 96 hours

Mobility The product is essentially insoluble in water.

Persistence and degradability

NONYLPHENOL: Terrestrial Fate: low: volatilization, mobility. Aquatic Fate: may adsorb to suspended solids & sediments; low volatilization; biodegrades [BOD28 ~78%]. Atmospheric Fate: photochemically degrades [half-life ~2.5 hours].

Environmental effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal

Partition coefficient 4.8

Mobility in environmental media - The product is essentially insoluble in water.

Additional information

Absorbable organically-bound halogen (AOX):

This product contains no organically-bound halogen.

13. Disposal Considerations

Dispose of in a licensed facility. Do not discharge into waterways or sewer systems without proper authorization. Dispose in accordance with all applicable regulations.

Container disposal:

Dispose of in a licensed facility. Recommend crushing, puncturing or other means to prevent unauthorized use of used containers.

14. Transport Information

Land transport

USDOT

Hazard class: 8

Packing group: III

ID number: UN 2735

Hazard label: 8

Proper shipping name: Amines, liquid, corrosive, n.o.s., (polyoxypropylenediamine)

Sea transport

IMDG

Hazard class: 8

Packing group: III

ID number: UN 2735

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Hazard label: 8
Marine pollutant: YES (para-nonylphenol)
Proper shipping name: Amines, liquid, corrosive, n.o.s., (polyoxypropylenediamine)

Air transport

IATA/ICAO

Hazard class: 8
Packing group: III
ID number: UN 2735
Hazard label: 8
Proper shipping name: Amines, liquid, corrosive, n.o.s., (polyoxypropylenediamine)

15. Regulatory Information

Federal Regulations

Registration status:

Chemical TSCA, US released /listed

Sara 302, 313

This material does not contain any chemical components with known CAS numbers that exceed the threshold (de minimus) reporting levels established by SARA Title III, Section 302, 313

EPCRA 311/312 (Hazard categories): Acute Health Hazard; Chronic Health Hazard

California Prop 65 Components:

This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

MA, PA, NJ Right-To-Know

Chemical	CAS	%
4-Nonylphenol, branched	84852-15-3	> 25 %

NFPA Hazard codes:

Health : 3 Fire: 1 Reactivity: 0 Special:

HMIS III rating

Health: 3 Flammability: 1 Physical hazard:0

Assessment of the hazard classes according to UN GHS criteria (most recent version):

Acute Tox.	4 (oral)	Acute toxicity
Skin Corr./Irrit.	1B	Skin corrosion/irritation
Eye Dam./Irrit	1	Serious eye damage/eye irritation
Reproductive Toxicity	2	Reproductive Toxicity
Aquatic Acute	2	Hazardous to the aquatic environment
Aquatic Chronic	2	Hazardous to the aquatic environment

16. Other Information

SDS Prepared by:

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LUCID EPOXY

The information contained herein is believed to be accurate. It is provided independently of any sale of the product for purpose of hazard communication as part of LUCID GRIP LLC Product Safety Program. It is not intended to constitute performance information concerning the product. No express warranty, or implied warranty of merchantability or fitness for a particular purpose is made with respect to the product or the information obtained herein. Data sheets are available for all LUCID products. You are urged to obtain data sheets for all LUCID products you buy, process, use or distribute and you are encouraged and requested to advise those who may come in contact with such products of the information contained therein.

To determine applicability or effects of any law or regulation with respect to the product, user should consult his legal advisor or the appropriate government agency. LUCID GRIP LLC does not undertake to furnish advice on such matters.