



Revision Number: 006.0

Issue date: 05/12/2021

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: LOCTITE CAT 59 CLR known as CATALYST 59 CLR (10g)
IDH number: 1188230
Product type/use: Epoxy Hardener
Restriction of Use: None identified
Region: United States
Company address: Henkel Corporation
 One Henkel Way
 Rocky Hill, Connecticut 06067
Contact information:
 Telephone: +1 (860) 571-5100
 MEDICAL EMERGENCY Phone: Poison Control Center
 1-877-671-4608 (toll free) or 1-303-592-1711
 TRANSPORT EMERGENCY Phone: CHEMTREC
 1-800-424-9300 (toll free) or 1-703-527-3887
 Internet: www.henkelna.com

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

DANGER: FLAMMABLE LIQUID AND VAPOR.
 HARMFUL IF SWALLOWED.
 CAUSES SEVERE SKIN BURNS AND EYE DAMAGE.
 MAY CAUSE AN ALLERGIC SKIN REACTION.
 SUSPECTED OF DAMAGING FERTILITY OR THE UNBORN CHILD.

| HAZARD CLASS | HAZARD CATEGORY |
|-----------------------|-----------------|
| FLAMMABLE LIQUID | 3 |
| ACUTE TOXICITY ORAL | 4 |
| SKIN CORROSION | 1B |
| SERIOUS EYE DAMAGE | 1 |
| SKIN SENSITIZATION | 1 |
| REPRODUCTIVE TOXICITY | 2 |

PICTOGRAM(S)



Precautionary Statements

Prevention: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat, sparks, open flames, hot surfaces - no smoking. Keep container tightly closed. No release into water. Use explosion-proof equipment. Use non-sparking tools. Take action to prevent static discharges. Avoid breathing vapors, mist, or spray. Wash affected area thoroughly after handling. Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves, clothing, eye and face protection.

Response: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or physician. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF exposed or concerned: Get medical attention. If skin irritation or rash occurs: Get medical attention. Wash contaminated clothing before reuse. In case of fire: Use foam, dry chemical or carbon dioxide to extinguish.

Storage: Store in a well-ventilated place. Keep cool. Store locked up.

Disposal: Dispose of contents and/or container according to Federal, State/Provincial and local governmental regulations.

Classification complies with OSHA Hazard Communication Standard (29 CFR 1910.1200) and is consistent with the provisions of the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

See Section 11 for additional toxicological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

| Hazardous Component(s) | CAS Number | Percentage* |
|--------------------------------|------------|-------------|
| 3-aminopropyltriethoxysilane | 919-30-2 | 60 - 90 |
| Bis(triethoxysilylpropyl)amine | 13497-18-2 | 10 - 30 |
| Ethanol | 64-17-5 | 1 - 5 |
| Toluene | 108-88-3 | 0.1 - 1 |
| tetraethyl silicate | 78-10-4 | 0.1 - 1 |

* Exact percentages may vary or are trade secret. Concentration range is provided to assist users in providing appropriate protections.

4. FIRST AID MEASURES

| | |
|----------------------|---|
| Inhalation: | Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get immediate medical attention. |
| Skin contact: | Immediately flush skin with plenty of water (using soap, if available). Remove contaminated clothing and footwear. Get medical attention. Wash clothing before reuse. |
| Eye contact: | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Seek medical attention immediately. |
| Ingestion: | If conscious, drink plenty of water. Do not induce vomiting. Get immediate medical attention. Never give anything by mouth to an unconscious person. |
| Symptoms: | See Section 11. |

5. FIRE FIGHTING MEASURES

| | |
|---|--|
| Extinguishing media: | 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: | Closed containers may rupture (due to build up of pressure) when exposed to extreme heat. Vapors are heavier than air and may travel along the ground or be moved by ventilation and subsequently ignited by heat, pilot lights or other ignition sources at locations distant from the material handling point. |
| Hazardous combustion products: | Oxides of carbon, oxides of nitrogen, irritating organic vapors. Oxides of silicon. |

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. Evacuate and ventilate spill area; dike spill to prevent entry into water system; wear full protective equipment during clean-up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, saw dust). Scrape up as much material as possible. Store in a closed container until ready for disposal. Refer to Section 8 "Exposure Controls / Personal Protection" prior to clean up. |

7. HANDLING AND STORAGE

Handling:

During use and until all vapors are gone: Keep area ventilated - do not smoke; extinguish all flames, pilot lights, and heaters; turn off stoves, electrical tools and appliances, and any other sources of ignition. Prevent contact with eyes, skin and clothing. Do not breathe vapor and mist. Wash thoroughly after handling. Do not taste or swallow. Refer to Section 8.

Storage:

Keep in a cool, well ventilated area away from heat, sparks and open flame. Keep container tightly closed until ready for use. Keep container dry.

For information on product shelf life, please review labels on container or check the Technical Data Sheet.

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 Component(s) | ACGIH TLV | OSHA PEL | AIHA WEEL | OTHER |
|--------------------------------|----------------|---|-----------|-------|
| 3-aminopropyltriethoxysilane | None | None | None | None |
| Bis(triethoxysilylpropyl)amine | None | None | None | None |
| Ethanol | 1,000 ppm STEL | 1,000 ppm (1,900 mg/m ³) PEL | None | None |
| Toluene | 20 ppm TWA | 200 ppm TWA 300 ppm Ceiling 500 ppm MAX. CONC 10 minutes | None | None |
| tetraethyl silicate | 10 ppm TWA | 100 ppm (850 mg/m ³) PEL | None | None |

Engineering controls:

Use explosion-proof mechanical ventilation and local exhaust to control contaminants to within their occupational exposure limits during the use of this product.

Respiratory protection:

Use NIOSH approved respirator if there is potential to exceed exposure limit(s).

Eye/face protection:

Safety goggles or safety glasses with side shields. Full face protection should be used if the potential for splashing or spraying of product exists. Safety showers and eye wash stations should be available.

Skin protection:

Use chemical resistant, impermeable clothing including gloves and either an apron or body suit to prevent skin contact.

9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|--|--|
| Physical state: | Liquid |
| Color: | Clear |
| Odor: | Amine |
| Odor threshold: | Not available. |
| pH: | Not available. |
| Vapor pressure: | < 1 mbar (20 °C (68°F)) |
| Boiling point/range: | > 410 °F (> 210°C) no method |
| Melting point/range: | < 32 °F (< 0°C) |
| Specific gravity: | 0.95 |
| Vapor density: | Not available. |
| Flash point: | 48.9 °C (120.02 °F) Tagliabue closed cup |
| Flammable/Explosive limits - lower: | Not available. |
| Flammable/Explosive limits - upper: | Not available. |
| Autoignition temperature: | Not available. |
| Flammability: | Not applicable |
| Evaporation rate: | Not available. |
| Solubility in water: | Reacts with water. |
| Partition coefficient (n-octanol/water): | Not available. |
| VOC content: | 947 g/l |
| Viscosity: | Not available. |
| Decomposition temperature: | Not available. |

10. STABILITY AND REACTIVITY

| | |
|--|---|
| Stability: | Stable under normal conditions of storage and use. |
| Hazardous reactions: | Will not occur. |
| Hazardous decomposition products: | Oxides of carbon. Oxides of nitrogen. |
| Incompatible materials: | Reacts with water: generation of heat. |
| Reactivity: | Not available. |
| Conditions to avoid: | Heat, flames, sparks and other sources of ignition. Avoid static discharge. Avoid contact with water. Avoid moisture. Store away from incompatible materials. |

11. TOXICOLOGICAL INFORMATION

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

Potential Health Effects/Symptoms

| | |
|----------------------|--|
| Inhalation: | Inhalation of vapors or mists of the product may be irritating to the respiratory system. May cause dizziness, incoordination, headache, nausea, and vomiting. |
| Skin contact: | Corrosive to skin. Causes skin burns. May cause allergic skin reaction. |
| Eye contact: | Causes serious eye damage. Direct contact with liquid may cause corneal damage and visual impairment. |
| Ingestion: | Harmful if swallowed. Irritation and corrosive action can occur in the mouth, stomach tissue and digestive tract if swallowed. May cause an aspiration hazard if swallowed. Ingestion of this product may result in central nervous system effects including headache, sleepiness, dizziness, slurred speech and blurred vision. |

| Hazardous Component(s) | LD50s and LC50s | Immediate and Delayed Health Effects |
|--------------------------------|---|---|
| 3-aminopropyltriethoxysilane | Inhalation LC50 (Rat, 4 h) = > 7.35 mg/l | Irritant, Allergen |
| Bis(triethoxysilylpropyl)amine | None | No Records |
| Ethanol | Oral LD50 (Rat) = 9.9 g/kg Oral LD50 (Rat) = 6.2 g/kg Oral LD50 (Rat) = 17.8 g/kg Oral LD50 (Rat) = 11.5 g/kg Oral LD50 (Mouse) = 3,450 mg/kg Oral LD50 (Rat) = 10.6 g/kg Oral LD50 (Rat) = 7,060 mg/kg Inhalation LC50 (Rat, 4 h) = 133.8 mg/l Inhalation LC50 (Rat, 4 h) = 124.7 mg/l Inhalation LC50 (Rat, 4 h) = > 115.9 mg/l Inhalation LC50 (Rat, 4 h) = 130.7 mg/l Inhalation LC50 (Rat, 4 h) = 128.2 mg/l Inhalation LC50 (Rat, 4 h) = 116.9 mg/l Inhalation LC50 (Mouse, 4 h) = 39 mg/l | Central nervous system, Irritant |
| Toluene | Oral LD50 (Rat) = 2.6 g/kg Dermal LD50 (Rabbit) = 12,124 mg/kg Inhalation LC50 (Rat, 4 h) = 12.5 - 28.8 mg/l Inhalation LC50 (Rat, 4 h) = 25.7 mg/l Inhalation LC50 (Rat, 4 h) = 28.1 mg/l Inhalation LC50 (Rat, 4 h) = 30 mg/l | Behavioral, Cardiac, Central nervous system, Developmental, Ear, Irritant |
| tetraethyl silicate | Inhalation LC50 (Rat, 4 h) = > 5.03 mg/l Inhalation LC50 (Rat, 4 h) = > 16.8 mg/l Inhalation LC50 (Rat, 4 h) = 10 mg/l Inhalation LC50 (Mouse, 4 h) = > 1000 ppm | Central nervous system, Irritant, Kidney, Liver, Lung |

| Hazardous Component(s) | NTP Carcinogen | IARC Carcinogen | OSHA Carcinogen (Specifically Regulated) |
|--------------------------------|----------------|-----------------|--|
| 3-aminopropyltriethoxysilane | No | No | No |
| Bis(triethoxysilylpropyl)amine | No | No | No |
| Ethanol | No | No | No |
| Toluene | No | No | No |
| tetraethyl silicate | No | No | No |

12. ECOLOGICAL INFORMATION

Ecological information: Not available.

13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal: Follow all local, state, federal and provincial regulations for disposal.

14. TRANSPORT INFORMATION

The transport information provided in this section only applies to the material/formulation itself, and is not specific to any package/configuration.

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

Proper shipping name: Flammable liquids, corrosive, n.o.s. (Ethanol, Aminopropyltriethoxysilane)
Hazard class or division: 3 (8)
Identification number: UN 2924
Packing group: III

International Air Transportation (ICAO/IATA)

Proper shipping name: Flammable liquid, corrosive, n.o.s. (Ethanol, Aminopropyltriethoxysilane)
Hazard class or division: 3 (8)
Identification number: UN 2924
Packing group: III

Water Transportation (IMO/IMDG)

Proper shipping name: FLAMMABLE LIQUID, CORROSIVE, N.O.S. (Ethanol, Aminopropyltriethoxysilane)
Hazard class or division: 3 (8)
Identification number: UN 2924
Packing group: III

15. REGULATORY INFORMATION

United States Regulatory Information

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

TSCA 12 (b) Export Notification: None above reporting de minimis

CERCLA/SARA Section 302 EHS: None above reporting de minimis.
CERCLA/SARA Section 311/312: Immediate Health, Delayed Health, Fire, Reactive
CERCLA/SARA Section 313: None above reporting de minimis.
CERCLA Reportable quantity: Ethanol (CAS# 64-17-5) 100 lbs. (45.4 kg)

California Proposition 65: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

Canada Regulatory Information

CEPA DSL/NDSL Status: All components are listed on or are exempt from listing on the Canadian Domestic Substances List.

16. OTHER INFORMATION

This safety data sheet contains changes from the previous version in sections: 2,3,8,11,13,15,16

Prepared by: Product Safety and Regulatory Affairs

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