Safety Data Sheet



Revision Number: 005.1 Issue date: 03/27/2018

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: LOCTITE 435 RUBBER TOUGH. INST

ADH known as LOCTITE® 435™

INSTANT ADHESIVE

Product type: Cyanoacrylate Restriction of Use: None identified

Company address: Henkel Corporation One Henkel Way

Rocky Hill, Connecticut 06067

IDH number: 840057

Item number: 40994 Region: United States

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 WARNING: BONDS SKIN IN SECONDS. COMBUSTIBLE LIQUID. CAUSES EYE IRRITATION.

MAY CAUSE RESPIRATORY IRRITATION.

HAZARD CLASS	HAZARD CATEGORY
FLAMMABLE LIQUID	4
EYE IRRITATION	2B
SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE	3

PICTOGRAM(S)



Precautionary Statements

Prevention:

Keep aw ay from heat, sparks, open flames, hot surfaces - no smoking. Avoid breathing vapors, mist, or spray. Wash affected area thoroughly after handling. Use only outdoors or in a well-

ventilated area. Wear protective gloves, eye protection, and face protection.

Response:

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or physician if you feel unw ell. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention. In case of fire: Use foam, dry

chemical or carbon dioxide to extinguish.

Storage:

Store in a well-ventilated place. Keep container tightly closed. 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.

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See Section 11 for additional toxicological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Component(s)	CAS Number	Percentage*
Ethyl 2-cyanoacrylate	7085-85-0	90 - 100
Phthalic anhydride	85-44-9	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 not breathing, give artificial respiration. If breathing is difficult, give oxygen. If symptoms develop and persist, get medical attention.

Do not pull bonded skin apart. Soak in warmsoapy water. Gently peel apart Skin contact:

using a blunt instrument. If skin is burned due to the rapid generation of heat by a large drop, seek medical attention. If lips are bonded, apply warmwater to the lips and encourage wetting and pressure from saliva in mouth. Peel or

roll lips apart. Do not pull lips apart with direct opposing force.

Eye contact: Immediately flush with plenty of waterfor at least 15 minutes. Get medical

attention. If eyelids are bonded closed, release eyelashes with warmwater by covering with a wet pad. Do not force eye open. Cyanoacrylate will bond to eye protein and will cause a lachrymatory effect which will help to debond the adhesive. Keep eye covered until debonding is complete, usually within 1-3 days. Medical attention should be sought in case solid particles of polymerized cyanoacrylate trapped behind the eyelid caused abrasive

damage.

Ingestion: Ensure breathing passages are not obstructed. The product will polymerize

rapidly and bond to the mouth making it almost impossible to sw allow. Saliva will separate any solidified product in several hours. Prevent the patient from

sw allowing any separated mass.

See Section 11. Symptoms:

Notes to physician: Surgery is not necessary to separate accidentally bonded tissues. Experience

has show n that bonded tissues are best treated by passive, non-surgical first

aid. If rapid curing has caused thermal burns they should be treated

symptomatically after adhesive is removed.

5. FIRE FIGHTING MEASURES

Extinguishing media: Water spray (fog), foam, dry chemical or carbon dioxide.

Special fire fighting procedures: Wear a self-contained breathing apparatus with a full face piece operated in

pressure-demand or other positive pressure mode.

Unusual fire or explosion hazards: Not available.

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Hazardous combustion products:

Trace amounts of toxic and/or irritating fumes may be released and the use of

breathing apparatus is recommended.

6. ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, is olate the hazard area and deny entry to unnecessary and unprotected personnel.

Environmental precautions: Ventilated area. Do not allow product to enter sew er or waterways.

Clean-up methods: Do not use cloths for mopping up. Flood with water to complete

polymerization and scrape off the floor. Cured material can be disposed of as non-hazardous waste. Refer to Section 8 "Exposure Controls / Personal

Protection" prior to clean up.

7. HANDLING AND STORAGE

Handling: Prevent contact with eyes, skin and clothing. Do not breathe vapor and mist.

> Wash thoroughly after handling. Avoid contact with fabric or paper goods. Contact with these materials may cause rapid polymerization which can generate smoke and strong irritating vapors, and cause thermal burns.

Keep in a cool, well ventilated area away from heat, sparks and open flame. Storage:

Keep container tightly closed until ready for use.

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
Ethyl 2-cyanoacrylate	0.2 ppm TWA	None	None	None
Phthalic anhydride	(SKIN) Inhalable fraction and vapor. 0.005 mg/m3 STEL Inhalable fraction and vapor. 0.002 mg/m3 TWA Inhalable fraction and vapor. (Respiratory sensitization)	2 ppm (12 mg/m3) PEL	None	None

Engineering controls: Use positive dow n-draft exhaust ventilation if general ventilation is insufficient

to maintain vapor concentration below established exposure limits.

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.

Skin protection: Use nitrile gloves and aprons as necessary to prevent contact. Do not use

PVC, nylon or cotton.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid

Color: Clear, Colorless, Straw Odor: Sharp, Irritating Odor threshold: Not available. Not applicable pH:

Vapor pressure: < 0.2 mm hg

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Boiling point/range: $> 149 \, ^{\circ}\text{C} \, (> 300.2 \, ^{\circ}\text{F})$ **Melting point/ range:** Not determined

Specific gravity: 1.1

Vapor density: 3 Approximately

Flash point: 80 - 93 °C (176°F - 199.4 °F) Tagliabue closed cup

Flam mable/Explosive limits - lower:
Flam mable/Explosive limits - upper:

Autoignition temperature:
Flam mability:
Flam mability:
Flam mability:
Flam mability:
Flam mability:
Fvaporation rate:

Not available.

Solubility in water: Polymerises in presence of water.

Partition coefficient (n-octanol/water): Not available.

VOC content: < 2 %; < 20 g/l (California SCAQMD Method 316B) (Estimated)

Viscosity: Not available. Decomposition temperature: Not available.

10. STABILITY AND REACTIVITY

Stability: Stable under recommended storage conditions.

Hazardous reactions: Rapid exothermic polymerization will occur in the presence of water, amines, alkalis and

alcohols.

Hazardous decomposition

products:

Not available.

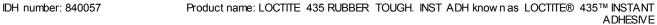
Incompatible materials: Water, Amines, Alkalis, Alcohols.

Reactivity: Not available.

Conditions to avoid: Spontaneous polymerization.

11. TOXICOLOGICAL INFORMATION

Relevant routes of exposure: Skin, Inhalation, Eyes









Potential Health Effects/Symptoms

Inhalation: May cause respiratory tract irritation. May cause allergic respiratory reaction. Exposure to

vapors above the established exposure limit results in respiratory irritation, which may lead to

difficulty in breathing and tightness in the chest.

Skin contact: May cause skin irritation. May cause allergic skin reaction. Bonds skin in seconds.

Cyanoacrylates have been reported to cause allergic reaction but due to rapid polymerization at the skin surface, an allergic response is rare. Cyanoacrylates generate heat on solidification. In rare circumstances a large drop will burn the skin. Cured adhesive does not present a health

hazard even if bonded to the skin.

Eye contact: Irritating to eyes. Causes excessive tearing. Eyelids may bond.

Ingestion: Not expected to be harmful by ingestion. Rapidly polymerizes (solidifies) and bonds in mouth. It

is almost impossible to sw allow.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
Ethyl 2-cyanoacrylate	None	Irritant, Allergen, Respiratory
Phthalic anhydride	Oral LD50 (Rat) = 800 mg/kg Oral LD50 (Mouse) = 1,500 mg/kg Oral LD50 (Rat) = 1,530 mg/kg Oral LD50 (Rat) = 4,020 mg/kg Oral LD50 (Rabbit) = > 1,000 mg/kg Dermal LD50 (Rabbit) = > 3,160 mg/kg	Allergen, Corrosive, Irritant, Respiratory

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Ethyl 2-cyanoacrylate	No	No	No
Phthalic anhydride	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.

Hazardous waste number:Not a RCRA hazardous waste.

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)

Propershipping name: Combustible liquid, n.o.s. (Cyanoacrylate ester)

Hazard class or division: Combustible Liquid

Identification number: NA 1993 Packing group: NA 1993

International Air Transportation (ICAO/IATA)

Propershipping name: Aviation regulated liquid, n.o.s. (Cyanoacrylate ester)
Hazard class or division: 9

Identification number: UN 3334

Packing group:

Exceptions: Not more than 500 ml (each inner package) - Unrestricted

Exceptions: Primary packs containing less than 500ml are unregulated by this mode of

transport and may be shipped unrestricted.

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Water Transportation (IMO/IMDG)

Propershipping name: Not regulated

Hazard class or division: None Identification number: None Packing group: None

REGULATORY INFORMATION

United States Regulatory Information

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

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.

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: Contains one or more components listed on the Non-Domestic Substances List. All other

components are listed on or are exempt from listing on the Domestic Substances List. Components listed on the NDSL must be tracked by all Canadian Importers of Record as required by Environment Canada. They may be imported into Canada in limited quantities.

Please contact Regulatory Affairs for additional details.

16. OTHER INFORMATION

This safety data sheet contains changes from the previous version in sections: New Safety Data Sheet format.

Prepared by: Product Safety and Regulatory Affairs

Issue date: 03/27/2018

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