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LOCTITE ULTRA GEL SUPER GLUE 4GR

CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: LOCTITE ULTRA GEL SUPER GLUE 4GR

Item No.: 1109181

Cyanoacrylate ester Product Type:

COMPOSITION, INFORMATION ON INGREDIENTS

Ingredients CAS No.

Ethyl cyanoacrylate 7085-85-0 60-100 Treated fumed silica 67762-90-7 1-5

Ingredients which have exposure limits

ACGIH OSHA OTHER Exposure Limits (TWA)

(PEL) Ingredients (TLV)

Ethyl cyanoacrylate 0.2 ppm TWA None 10mg/m3 inhalable Treated fumed silica 5mg/m3 respirable dust

fraction, 3mg/m3 15mg/m3 total dust

respirable fraction, TWA

HAZARDS IDENTIFICATION

Emergency Overview: Bonds skin in seconds. May cause eye, skin, and

respiratory irritation. Combustible liquid and vapor.

Inhalation: Exposure to vapors above the established exposure limit

> results in respiratory irritation which may lead to difficulty in breathing and tightness in the chest. Bonds to skin in seconds. May cause skin irritation.

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 swallow.

Estimated acute oral LD50 more than 5000mg/kg (rat). Estimated acute dermal LD 50 more than 2000 mg/kg

(rabbit).

Primary Routes of Entry:

Existing Conditions

Skin contact:

Skin, inhalation, eyes

Eye, skin, and respiratory disorders. Aggravated by Exposure:

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Carcinogen

(continued)

Product Name: LOCTITE ULTRA GEL SUPER GLUE 4GR

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3. HAZARDS IDENTIFICATION

Literature Referenced

Ingredients Target Organ and Other Health Effects NTP IARC OSHA

Ethyl cyanoacrylate ALG IRR RES NO NO NO Treated fumed silica IRR NO NO NO

Abbreviations

N/A Not Applicable AC3 ACGIH animal carcinogen.

ALG Allergen BLO Blood

BNM Bone Marrow CNS Central nervous system

EYE Eyes IMM Immune system

IRR Irritant LIV Liver
MUT Mutagen RES Respiratory

SKI Skin THY Thyroid

4. FIRST AID MEASURES

Ingestion: Ingestion is not likely. See supplemental page for

emergency procedures.

Inhalation: Remove to fresh air. If symptoms persist,

obtain medical attention.

Skin Contact: Soak in warm water. See supplemental page for

emergency procedures.

Eye Contact: Immediately flush with plenty of water for at least 15

minutes. See supplemental page for emergency procedures.

5. FIRE FIGHTING MEASURES

Flash Point: 176 - 200°F Method: Tag Closed Cup

Autoignition temperature: 485°C (905°F)

Extinguishing media: Carbon dioxide, foam, dry powder

Special Firefighting

Procedures: Wear positive pressure self-contained breathing

apparatus (SCBA).

Hazardous combustion

products formed: Trace amounts of toxic and/or irritating fumes may be

released and the use of breathing apparatus is

recommended.

Unusual Fire or

Explosion Hazards: None

Explosive Limits:

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

Respiratory

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ACCIDENTAL RELEASE MEASURES

Steps to be taken in case

of spill or leak: Do not use cloths for mopping. Flood with water to

polymerize and scrape off the floor. Cured material can

be disposed of as non-hazardous waste.

Environmental precautions: Ventilate area. Prevent product from entering the

drains.

HANDLING AND STORAGE

Storage: Keep in a cool, well ventilated area away from heat,

> sparks and open flame. Keep container tightly closed until rady for use. No special restrictions on storage

with other products.

Handling: Avoid contact with skin, eyes and clothing.

> breathing vapor. 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.

EXPOSURE CONTROLS, PERSONAL PROTECTION

Eyes: Safety glasses with side shields or goggles. Skin: Nitrile or polyethylene gloves and aprons.

Do not use PVC, nylon or cotton.

See supplemental page for additional information. Ventilation: Positive down-draft exhaust ventilation should be

provided to maintain vapor concentration below TLV Use NIOSH approved respirator if there is potential to

exceed exposure limit(s).

See Section 2 for Exposure Limits.

PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clear liquid Odor: Sharp, irritating More than 300°F (149°C) Boiling Point:

:Hq Does not apply

Solubility in Water: Polymerizes in presence of water

Specific Gravity: 1.1 @ 20°C

Less than 2%; 20 g/L (California SCAQMD Method 316B, VOC Content:

estimated)

Less than 0.2 mm Hg Vapor Pressure:

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9. PHYSICAL AND CHEMICAL PROPERTIES (continued)

Vapor Density: Approximately 3

Evaporation Rate

(Ether = 1) Not available

Partition coefficient

(n-octanol/water): Not applicable Odor Threshold: 1-2 ppm

10. STABILITY AND REACTIVITY

Stability: Stable under recommended storage conditions.

Hazardous Polymerization: Rapid exothermic polymerization will occur in the

presence of water, amines, alkalis and alcohols.

Incompatibility: Water, alcohols, amines, alkalis.

Conditions to Avoid: Spontaneous polymerization

Hazardous Decomposition

Products: None

11. TOXICOLOGICAL INFORMATION

See Section 3.

12. ECOLOGICAL INFORMATION

No data available

13. DISPOSAL CONSIDERATIONS

Recommended methods of

disposal: Dispose of in accordance with Federal, State and local

regulations.

EPA Hazardous Waste

Number: Not a RCRA Hazardous Waste

14. TRANSPORTATION INFORMATION

DOT (49 CFR 172) - Domestic Ground Transport:

Proper Shipping Name: Combustible liquids, n.o.s. (Cyanoacrylate ester)

Hazard Class or

Division: 3

Identification Number: UN 1993 Packing group: None

Exceptions: Unrestricted (Not more than 450 L)

Marine Pollutant: None

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International Air Transportation (ICAO/IATA):

Proper Shipping Name: Aviation regulated liquid, n.o.s., (Cyanoacrylate

Ester)

Class or Division: 9

UN or ID Number: UN 3334 Packing group: None

Exceptions: (Not more than 500mL) Unrestricted

Water Transportation (IMO/IMDG):

Proper Shipping Name: Unrestricted

Class or Division: None
UN or ID Number: None
Packing group: None
Marine pollutant: None

15. REGULATORY INFORMATION

United States

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.

CERCLA/SARA 311/312: Immediate Health Hazard, Delayed Health Hazard, Fire,

Reactive

CERCLA/SARA 313: None.

CA Proposition 65: No Prop 65 listed chemicals are known to be present.

Canada

CEPA DSL/NDSL Status: Contains one or more components listed on the Non-

Domestic Substances list. Those components must be tracked by all Canadian importers of Record as required by the Canadian Environmental Protection Agency. They may be imported into Canada in limited quantities.

WHMIS hazard class: B.3, D.2.B

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16. OTHER INFORMATION

Estimated NFPA(R) Code:

Health Hazard: 2
Fire Hazard: 2
Reactivity Hazard: 1

Specific Hazard: Does not apply

Estimated HMIS(R) Code:

Health Hazard: 2
Flammability Hazard: 2
Reactivity Hazards: 1

Personal Protection: See Section 8.

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

Prepared by:

Company: Regulatory Affairs

Henkel Corporation, Avon, Ohio

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1109181

Supplement

INFORMATION FOR FIRST AID AND CASUALTY ON TREATMENT FOR ADHESION OF HUMAN SKIN TO ITSELF IF CAUSED BY CYANOACRYLATE ADHESIVES

Cyanoacrylate adhesive is a very fast setting and strong adhesive. It bonds human tissue including skin in seconds. Experience has shown that accidents due to cyanoacrylates are handled best by passive, nonsurgical first aid. Treatment of specific types of accidents are given below.

SKIN CONTACT

Remove excess adhesive. Massage in cooking or vegetable oil, then rinse with warm, soapy water. The adhesive will come loose from the skin in several hours. Cured adhesive does not present a health hazard even when bonded to the skin.

Avoid contact with clothes, fabrics, rags, or tissue. Contact with these materials may cause polymerization. The polymerization of large amounts of adhesive will generate heat causing smoke, skin burns, and strong, irritating vapors. Wear nitrile or polyethylene gloves and apron when handling large amounts of adhesive.

SKIN ADHESION

First massage the bonded surfaces with cooking or vegetable oil, then rinse with warm, soapy water. Peel or roll the surfaces apart with the aid of a blunt edge, e.g. a spatula or a teaspoon handle; then remove adhesive from the skin with soap and water. Do not try to pull surfaces apart with a direct opposing action.

EYELID TO EYELID OR EYEBALL ADHESION

In the event that eyelids are stuck together or bonded to the eyeball, wash thoroughly with warm water and apply a gauze patch. The eye will open without further action, typically in 1-4 days. There will be no residual damage. Do not try to open the eyes by manipulation.

ADHESIVE ON THE EYEBALL

Cyanoacrylate introduced into the eyes will attach itself to the eye protein and will disassociate from it over intermittent periods, generally covering several hours. This will cause periods of weeping until clearance is achieved. During the period of contamination, double vision may be experienced together with a lachrymatory effect, and it is important to understand the cause and realize that disassociation will normally occur within a matter of hours, even with gross contamination.

MOUTH

If lips are accidentally stuck together, apply lots of warm water to the lips and encourage maximum wetting and pressure from saliva inside the mouth. Peel or roll lips apart. Do not try to pull the lips with direct opposing action.

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It is almost impossible to swallow cyanoacrylate. The adhesive solidifies and adheres in the mouth. Saliva will lift the adhesive in one half to two days. In case a lump forms in the mouth, position the patient to prevent ingestion of the lump when it detaches.

BURNS

Cyanoacrylates give off heat on solidification. In rare cases a large drop will increase in temperature enough to cause a burn. Burns should be treated normally after the lump of cyanoacrylate is released from the tissue as described above.

SURGERY

It should never be necessary to use such a drastic method to separate accidentally bonded skin.



