LOCTITE Precision Max Super Glue

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: LOCTITE Precision Max Super Glue
IDH: 234796
Product Type: Cyanoacrylate ester

2. COMPOSITION, INFORMATION ON INGREDIENTS

Ingredients:

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl cyanoacrylate</td>
<td>7085-85-0</td>
<td>60-100</td>
</tr>
</tbody>
</table>

Ingredients which have exposure limits

<table>
<thead>
<tr>
<th>Exposure Limits (TWA)</th>
<th>ACGIH (TLV)</th>
<th>OSHA (PEL)</th>
<th>OTHER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl cyanoacrylate</td>
<td>0.2 ppm TWA</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

3. HAZARDS IDENTIFICATION

Toxicity: Skin contact may cause burns. Bonds skin rapidly and strongly. Skin and eye irritant. Estimated oral LD50 more than 5000mg/kg. Estimated dermal LD 50 more than 2000 mg/kg.

Primary Routes of Entry: None known

Signs and Symptoms of Exposure: Vapor is irritating to eyes and mucous membranes above TLV. Prolonged and repeated overexposure to vapors may produce symptoms of non-allergic asthma in sensitive individuals.

Existing Conditions Aggravated by Exposure: None known

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>Literature Referred</th>
<th>Carcinogen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl cyanoacrylate</td>
<td>ALG IRR RES</td>
<td>NO NO NO</td>
</tr>
</tbody>
</table>

Abbreviations

N/A Not Applicable
ALG Allergen IRR Irritant
MUT Mutagen RES Respiratory
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: Flush with water. See supplemental page for emergency procedures.

5. FIRE FIGHTING MEASURES

Flash Point: 176 – 93.4°F Method: Tag Closed Cup

Recommended Extinguishing Agents: Carbon dioxide, foam, dry chemical

Special Firefighting Procedures: Firefighters should wear positive pressure SCBA

Hazardous Products formed by Fire or Thermal Decomp Irritating organic vapors

Unusual Fire or Explosion Hazards: None

Explosive Limits:
(% by volume in air)Lower Not available
(% by volume in air)Upper Not available

6. ACCIDENTAL RELEASE MEASURES

Steps to be taken in case of spill or leak: Flood with water to polymerize. Soak up with an inert absorbent.

7. HANDLING AND STORAGE

Safe Storage: Store at or below 75øF

(Contact Loctite Customer Service 1-800-243-4874 for shelf life information)

Handling: Avoid contact with skin and eyes. Avoid breathing vapor.

8. EXPOSURE CONTROLS, PERSONAL PROTECTION

Eyes: Safety glasses or goggles.

Skin: Nitrile or polyethylene gloves and aprons.

Do not use cotton.

See supplemental page for additional information.

Ventilation: Positive down-draft exhaust ventilation should be provided to maintain vapor concentration below TLV

Respiratory Not available
Product Name: **LOCTITE Precision Max Super Glue**

**IDH:** 234796

9. PHYSICAL AND CHEMICAL PROPERTIES

- **Appearance:** Clear colourless to straw liquid
- **Odor:** Sharp, irritating
- **Boiling Point:** More than 300øF
- **pH:** Does not apply
- **Solubility in Water:** Polymerized by water
- **Specific Gravity:** 1.05
- **Volatile Organic Compound (EPA Method 24):** Less than 20 g/L (California SCAQMD Method 316) est.
- **Vapor Pressure:** Less than 0.2 mm
- **Vapor Density:** Approximately 3
- **Evaporation Rate (Ether = 1):** Not available

10. STABILITY AND REACTIVITY

- **Stability:** Stable
- **Hazardous Polymerization:** Will not occur
- **Incompatibility:** Polymerized by contact with water, alcohols, amines, alkalies.
- **Conditions to Avoid:** Not available
- **Hazardous Decomposition Products (non-thermal):** None

11. TOXICOLOGICAL INFORMATION

See Section 3.

12. ECOLOGICAL INFORMATION

No data available

13. DISPOSAL CONSIDERATIONS

- **Recommended methods of disposal:** Polymerize as above. Incinerate following EPA and local regulations.
- **EPA Hazardous Waste Number:** NH - Not a RCRA Hazardous Waste Material
14. TRANSPORTATION INFORMATION

DOT (49 CFR 172)
Domestic Ground Transport
  Proper Shipping Name: Unrestricted (Not more than 450 liters);
  Combustible liquids, n.o.s. (Cyanoacrylate ester)
  (More than 450 liters)
  Hazard Class or Division: Unrestricted (Not more than 450 liters)
  Combustible liquid (More than 450 liters)
  Identification Number: None (Not more than 450 liters);
  NA 1993 (More than 450 liters)
  Marine Pollutant: None

IATA
  Proper Shipping Name: Unrestricted (Not more than one pint);
  Aviation regulated liquid, n.o.s., (Cyanoacrylate Ester) (More than one pint)
  Class or Division: Unrestricted (Not more than one pint);
  Class 9 (More than one pint)
  UN or ID Number: None (Not more than one pint)
  UN 3334 (More than one pint)

15. REGULATORY INFORMATION

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

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 440) 937-7000
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. Soak in 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 immerse the bonded surfaces in 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.

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.