



Revision Number: 003.2

Issue date: 05/31/2018

1. PRODUCT AND COMPANY IDENTIFICATION

| | | | |
|----------------------------|---|-----------------------------|---|
| Product name: | LOCTITE® 4601™ INSTANT ADHESIVE PRISM® MEDICAL DEVICE ADHESIVE | IDH number: | 229810 |
| Product type: | Cyanoacrylate | Item number: | 18692 |
| 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

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

| HAZARD CLASS | HAZARD CATEGORY |
|------------------|-----------------|
| FLAMMABLE LIQUID | 4 |
| EYE IRRITATION | 2B |

PICTOGRAM(S)

None

Precautionary Statements

| | |
|--------------------|--|
| Prevention: | Keep away from heat, sparks, open flames, hot surfaces - no smoking. Wash affected area thoroughly after handling. Wear protective gloves, eye protection, and face protection. |
| Response: | 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 cool. |
| 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* |
|---------------------------------|------------|-------------|
| Beta-Methoxyethyl Cyanoacrylate | 27816-23-5 | 90 - 100 |

* 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. If symptoms develop and persist, get medical attention. |
| Skin contact: | Do not pull bonded skin apart. Soak in warm soapy water. Gently peel apart 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 warm water 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 water for at least 15 minutes. Get medical attention. If eyelids are bonded closed, release eyelashes with warm water 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 swallow. Saliva will separate any solidified product in several hours. Prevent the patient from swallowing any separated mass. |
| Symptoms: | See Section 11. |
| Notes to physician: | Surgery is not necessary to separate accidentally bonded tissues. Experience has shown 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 firefighting 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: | None |
| 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, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

| | |
|-----------------------------------|---|
| Environmental precautions: | Ventilate area. Do not allow product to enter sewer 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.
- Storage:** Keep in a cool, well ventilated area away from heat, sparks and open flame. 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 |
|---------------------------------|-----------|----------|-----------|-------------|
| Beta-Methoxyethyl Cyanoacrylate | None | None | None | 0.2 ppm TWA |

- Engineering controls:** Use positive down-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, to, Straw
- Odor:** Negligible
- Odor threshold:** Not available.
- pH:** Not applicable
- Vapor pressure:** < 0.2 mm hg
- Boiling point/range:** > 300 °F (> 148.9 °C)
- Melting point/ range:** Not determined
- Specific gravity:** 1.1
- Vapor density:** Not available.
- Flash point:** 80 - 93 °C (176°F - 199.4 °F)
- Flammable/Explosive limits - lower:** Not determined
- Flammable/Explosive limits - upper:** Not determined
- Autoignition temperature:** Not determined
- Flammability:** Not applicable
- Evaporation rate:** Not available.
- Solubility in water:** Polymerises in presence of water.
- Partition coefficient (n-octanol/water):** Not applicable
- 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: | None |
| Incompatible materials: | Water, amines, alkalis and 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. 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. 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 swallow. |

| Hazardous Component(s) | LD50s and LC50s | Immediate and Delayed Health Effects |
|---------------------------------|-----------------|--------------------------------------|
| Beta-Methoxyethyl Cyanoacrylate | None | Irritant, Allergen |

| Hazardous Component(s) | NTP Carcinogen | IARC Carcinogen | OSHA Carcinogen (Specifically Regulated) |
|---------------------------------|----------------|-----------------|--|
| Beta-Methoxyethyl Cyanoacrylate | 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)

Proper shipping name: Combustible liquid, n.o.s. (Cyanoacrylate ester)
Hazard class or division: Combustible Liquid
Identification number: NA 1993
Packing group: III

International Air Transportation (ICAO/IATA)

Proper shipping name: Aviation regulated liquid, n.o.s. (Cyanoacrylate ester)
Hazard class or division: 9
Identification number: UN 3334
Packing group: III
Exceptions: Primary packs containing less than 500ml are unregulated by this mode of transport and may be shipped unrestricted.

Water Transportation (IMO/IMDG)

Proper shipping name: Not regulated
Hazard class or division: None
Identification number: None
Packing group: None

15. REGULATORY INFORMATION

United States Regulatory Information

TSCA 8 (b) Inventory Status: All components are listed or are exempt from listing on the Toxic Substances Control Act 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: Reactive, Fire, Immediate Health
CERCLA/SARA Section 313: This product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40 CFR 372). Beta-Methoxyethyl Cyanoacrylate (CAS# 27816-23-5).
California Proposition 65: No California Proposition 65 listed chemicals are known to be present.

Canada Regulatory Information

CEPA DSL/NDL 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: New Safety Data Sheet format.

Prepared by: Product Safety and Regulatory Affairs

Issue date: 05/31/2018

DISCLAIMER: The data contained herein are furnished for information only and are believed to be reliable. However, Henkel Corporation and its affiliates ("Henkel") does not assume responsibility for any results obtained by persons over whose methods Henkel has no control. It is the user's responsibility to determine the suitability of Henkel's products or any production methods mentioned herein for a particular purpose, and to adopt such precautions as may be advisable for the protection of property and persons against any hazards that may be involved in the handling and use of any Henkel's products. In light of the foregoing, Henkel specifically disclaims all warranties, express or implied, including warranties of merchantability and fitness for a particular purpose, arising from sale or use of Henkel's products. Henkel further disclaims any liability for consequential or incidental damages of any kind, including lost profits.