

Revision Number: 002.0 Issue date: 09/23/2014

# 1. PRODUCT AND COMPANY IDENTIFICATION

**LOCTITE 4541 INSTANT ADHEISVE** IDH number: **Product name:** 223088

known as Prism® 4541 Medical

**Device Ins** 

Product type: Cyanoacrylate Item number: 18690 Restriction of Use: Region: **United States** None identified

Company address: Contact information: Henkel Corporation

Telephone: (860) 571-5100 One Henkel Way

MEDICAL EMERGENCY Phone: Poison Control Center Rocky Hill, Connecticut 06067 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 away from heat, sparks, open flames, hot surfaces - no smoking. Avoid breathing vapors, mist, or spray. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area.

Wear protective gloves, eye protection, and face protection.

Response:

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to remove. Continue rinsing. Call a poison control center or physician if you feel unwell. 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:

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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*
Ethyl 2-cyanoacrylate	7085-85-0	60 - 100
Filler	Proprietary	5 - 10
Thickener	Proprietary	5 - 10

<sup>\*</sup> Exact percentage is a 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 bums 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: 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, 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.

For information on product shelf life contact Henkel Customer Service at (800) 243-4874.

#### 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
Filler	10 mg/m3 TWA Inhalable dust. 3 mg/m3 TWA Respirable fraction.	15 mg/m3 TWA Total dust. 5 mg/m3 TWA Respirable fraction.	None	None
Thickener	None	None	None	None

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: Gel Color: Clear

Odor: Sharp, irritating
Odor threshold: Not available.
pH: Not applicable
Vapor pressure: < 0.2 mm hg

Boiling point/range: > 300 °F (> 148.9 °C) None

Melting point/ range: Not determined

Specific gravity: 1.05

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Vapor density: Not available.

Flash point: 80 - 93 °C (176°F - 199.4 °F) None

Flammable/Explosive limits - lower:
Flammable/Explosive limits - upper:
Autoignition temperature:

Evaporation rate:

Not available.
Not available.
Not available.

Solubility in water: Not soluble. Polymerizes in presence of water.

Partition coefficient (n-octanol/water):

VOC content:

Viscosity:

Decomposition temperature:

Not available.

Not available.

Not available.

## 10. STABILITY AND REACTIVITY

Stability: Not available.

Hazardous reactions: Not available.

**Hazardous decomposition** 

products:

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None

Incompatible materials: Rapid exothermic polymerization will occur in the presence of 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: Bonds skin in seconds. May cause skin irritation. 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. Cyanoacrylates have been reported to cause allergic reaction but due to rapid polymerization at the skin surface, an allergic response

is rare.

**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
Ethyl 2-cyanoacrylate	None	Irritant, Allergen, Respiratory
Filler	None	Irritant
Thickener	None	Irritant

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Ethyl 2-cyanoacrylate	No	No	No
Filler	No	No	No
Thickener	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

Water Transportation (IMO/IMDG)

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

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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: Catherine Bimler, Regulatory Affairs Specialist

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Product name: LOCTITE 4541 INSTANT ADHEISVE known as Prism® 4541 Medical Device Ins Page 5 of 6 **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.

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