

HENKEL LOCTITE CORPORATION

08/18/02

ROCKY HILL, CONNECTICUT 06067  
EMERGENCY PHONE: (860) 571-5100

MATERIAL SAFETY DATA SHEET

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Loctite(R) 480 Prism(R) Instant Adhesive  
48040

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Loctite(R) 480 Prism(R) Instant Adhesive  
Black Toughened

Item No.: 48040

Product Type: Cyanoacrylate ester

## 2. COMPOSITION, INFORMATION ON INGREDIENTS

Ingredients	CAS No.	%
Ethyl cyanoacrylate	7085-85-0	85-90
Ethylene copolymer rubber	54545-50-5	5-10
CARBON BLACK	1333-86-4	1-3
PHTHALIC ANHYDRIDE*	85-44-9	0.1-1
HYDROQUINONE	123-31-9	0.1-0.5

\* This component is listed as a SARA Section 313 Toxic Chemical.

Ingredients which have exposure limits

Exposure Limits (TWA) Ingredients	ACGIH (TLV)	OSHA (PEL)	OTHER
Ethyl cyanoacrylate	0.2 ppm TWA	None	None
CARBON BLACK	3.5 mg/m3 TWA	3.5 mg/m3 TWA	5ppm
PHTHALIC ANHYDRIDE	1 ppm TWA	1 ppm TWA	None
HYDROQUINONE	2 mg/m3 TWA	2 mg/m3 TWA	2 mg/m3 TWA 4 mg/m3 STEL

Exposure Limits (STEL) Ingredients	ACGIH (TLV)	OSHA (PEL)
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## 3. HAZARDS IDENTIFICATION

Toxicity: Skin contact may cause burns.  
Bonds skin rapidly and strongly.  
Skin and eye irritant.

Primary Routes of Entry: None known

Signs and Symptoms  
of Exposure: Vapor is irritating to eyes and mucous membranes

above TLV. Exposure to vapors above the established limits may cause symptoms of non-allergic asthma.

Existing Conditions

Aggravated by Exposure: None known

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## 3. HAZARDS IDENTIFICATION

(continued)

Ingredients	Literature Referenced Target Organ and Other Health Effects	Carcinogen		
		NTP	IARC	OSHA
Ethyl cyanoacrylate	ALG IRR RES	NO	NO	NO
Ethylene copolymer rubber	No Data	NO	NO	NO
CARBON BLACK	RES	NO	2B	NO
PHTHALIC ANHYDRIDE	AC4 ALG COR IRR RES	NO	NO	NO
HYDROQUINONE	BLO BNM CNS EYE IMM IRR LIV MUT SKI THY	NO	N/A	NO

## Abbreviations

N/A Not Applicable	2B Possibly carcinogenic to humans
AC4 ACGIH-Unclassifiable as human carc.	ALG Allergen
BLO Blood	BNM Bone Marrow
CNS Central nervous system	COR Corrosive
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: Flush with water. See supplemental page for emergency procedures.

## 5. FIRE FIGHTING MEASURES

Flash Point: 150-200°F Method: Tag Closed Cup  
Recommended

Extinguishing Agents: Carbon dioxide, foam, dry chemical  
Special Firefighting  
Procedures: Not available  
Hazardous Products formed  
by Fire or Thermal Decomp Irritating organic vapors  
Unusual Fire or  
Explosion Hazards: None

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## 5. FIRE FIGHTING MEASURES

(continued)

## 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 completely. Solid  
polymer is non hazardous.

## 7. HANDLING AND STORAGE

Safe Storage: Store at or below 75°F  
(Contact Loctite Customer Service 1-800-243-4874 for shelf life information)  
Handling: Avoid contact with eyes and skin. Avoid breathing  
of vapors

## 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

See Section 2 for Exposure Limits.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Viscous, black liquid  
Odor: Sharp, irritating  
Boiling Point: More than 300°F  
pH: Does not apply  
Solubility in Water: Polymerized by water  
Specific Gravity 1.1

Volatile Organic Compound

(EPA Method 24)	Less than 20 g/l (California SCAQMD method 316B)
Vapor Pressure:	Less than 0.2mm
Vapor Density:	Approximately 3
Evaporation Rate (Ether = 1)	Not available

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## 10. STABILITY AND REACTIVITY

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

## 11. TOXICOLOGICAL INFORMATION

Estimated oral LD50 more than 5000 mg/kg.  
Estimated dermal LD50 more than 2000 mg/kg.

## 12. ECOLOGICAL INFORMATION

No data available

## 13. DISPOSAL CONSIDERATIONS

Recommended methods of  
disposal: Polymerize as above. Incinerate in accordance  
with 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)  
ID 8027 (More than one pint)



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## 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 applyEstimated 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: Stephen Repetto  
Title: Research Chemist - Health & Regulatory Affairs  
Company: Loctite Corporation  
1001 Trout Brook Crossing, Rocky Hill CT 06067  
(24hr.) Phone: (860) 571-5100  
Revision Date: September 21, 2000 Revision: 0005

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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. 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

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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.

[applic](#)

Loctite