# **Safety Data Sheet**



Revision Number: 004.1

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## 1. PRODUCT AND COMPANY IDENTIFICATION

Product name: Product type: Cyanoacrylate Restriction of Use: None identified Company address: Henkel Corporation One Henkel Way Rocky Hill, Connecticut 06067

LOCTITE 438 BK RUB CA

**IDH number:** 840073 Item number: 40997 **Region: United States** 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.	
	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 do. 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:	5
	Store in a well-ventilated place. Keep container tightly closed. Store in a well-ventilated place. Keep cool. Store locked up.
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*
Ethyl 2-cyanoacrylate	7085-85-0	90 - 100
Carbon black	1333-86-4	0.1 - 1

\* 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 not breathing, give artificial respiration. If breathing is difficult, give oxygen. 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 hea 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 l 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 th 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. Dry powder.
Special firefighting procedures:	Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA).
Unusual fire or explosion hazards:	Not available.

#### 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:	Ventilated 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
Ethyl 2-cyanoacrylate	0.2 ppm TWA	None	None	None
Carbon black	3 mg/m3 TWA Inhalable fraction.	3.5 mg/m3 PEL	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				

Liquid

Physical state: Color: Odor: Odor threshold: pH: Vapor pressure: Boiling point/range: Melting point/range: Specific gravity: Vapor density: Flash point: Flammable/Explosive limits - lower: Flammable/Explosive limits - upper: Autoignition temperature:

Black Sharp, irritating Not available. Not applicable < 0.2 mm hg> 149 °C (> 300.2 °F) Not determined 1.1 3 Approximately 80 - 93 °C (176°F - 199.4 °F) Not available. Not available. 485 °C (905°F) Flammability: Evaporation rate: Solubility in water: Partition coefficient (n-octanol/water): VOC content: Viscosity: Decomposition temperature: Not applicable Not available. Polymerises in presence of water. Not available. < 2 %; < 20 g/l (California SCAQMD Method 316B) (Estimated) Not available. 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:	Not available.
Incompatible materials:	Water, Amines, Alkalis, Alcohols.
Reactivity:	Not available.
Conditions to avoid:	Spontaneous polymerization.
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### **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: Ingestion:	Irritating to eyes. Causes excessive tearing. Eyelids may bond. 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
Carbon black	Oral LD50 (Rat) = > 8,000 mg/kg	Respiratory, Some evidence of carcinogenicity

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Ethyl 2-cyanoacrylate	No	No	No
Carbon black	No	Group 2B	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: Ш 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: Ш Exceptions: Not more than 500 ml (each inner package) - 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: TSCA 12 (b) Export Notification:	All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory. None above reporting de minimis	
CERCLA/SARA Section 302 EHS: CERCLA/SARA Section 311/312: CERCLA/SARA Section 313:	None above reporting de minimis. Immediate Health, Delayed Health, Fire, Reactive None above reporting de minimis.	
California Proposition 65:	This product contains a chemical known in the State of California to cause cancer. This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.	
Canada Regulatory Information		
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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