Material Safety Data Sheet



Revision Number: 008.0



1. PRODUCT AND COMPANY IDENTIFICATION

Product name:

Product use:

Company address: Henkel Corporation

2515 Meadowpine Boulevard Mississauga, Ontario L5N 6C3

LOCTITE 404 INSTANT ADHESIVE known as LOCTITE® 404™ INSTANT ADHESIVE Adhesive IDH number:

135465

Item number:46551Region:CanadaContact information:Telephone:905.814.6511MEDICAL EMERGENCY Phone:Poison Control Center1-877-671-4608 (toll free) or 1-303-592-1711TRANSPORT EMERGENCY Phone:CHEMTREC1-800-424-9300 (toll free) or 1-703-527-3887Internet:www.henkelna.com

2. HAZARDS IDENTIFICATION

Color: CI	quid WHMIS hazard class: B.3, D.2.A, D.2.B ear, Colorless harp, Irritating
WARNING:	BONDS SKIN IN SECONDS. MAY CAUSE EYE AND RESPIRATORY TRACT IRRITATION.
Relevant routes of exposure:	Skin, Inhalation, Eyes
Potential Health Effects	
Inhalation:	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 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.
Existing conditions aggravate exposure:	by Eye, skin, and respiratory disorders.

See Section 11 for additional toxicological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous components	CAS NUMBER	%
Ethyl 2-cyanoacrylate	7085-85-0	60 - 100
Hydroquinone	123-31-9	0.1 - 1

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.

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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.
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 80 - 93 °C (176°F - 199.4 °F) Tagliabue closed cup re: 485 °C (905°F)

Autoignition temperature:	485 °C (905°F)
Flammable/Explosive limits - lower:	Not determined
Flammable/Explosive limits - upper:	Not determined
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.
Sensitivity to Mechanical Impact:	Not available.
Sensitivity to static discharge:	Not available.

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.

Flash point:

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 Canada Customer Service at 800-263-5043.

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 components	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
Ethyl 2-cyanoacrylate	0.2 ppm TWA	None	None	None
Hydroquinone	1 mg/m3 TWA (Dermal sensitization)	2 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 a NIOSH approved supplied air respirator with an organic cartridge if the potential to exceed established exposure limits exists.			
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.		tact. Do not use
9. PHYSICAL AND CHEMICAL PROPERTIES				

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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: Evaporation rate: Solubility in water: Partition coefficient (n-octanol/water): **VOC content:**

Clear, Colorless Sharp, Irritating 1 - 2 ppm Not applicable < 0.2 mm hg > 149 °C (> 300.2 °F) Not determined 1.09 at 23.9 °C (75.02 °F) 3 Approximately 80 - 93 °C (176°F - 199.4 °F) Tagliabue closed cup Not determined Not determined 485 °C (905°F) Not available. Polymerises in presence of water. Not determined < 2 %; < 20 g/l (California SCAQMD Method 316B) (Estimated)

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.	
Conditions to avoid:	Spontaneous polymerization.	
11. TOXICOLOGICAL INFORMATION		
Acute oral product toxicity:	LD50 (rat) > 5,000 mg/kg (Estimated)	
Acute dermal product toxicity:	LD50 (rabbit) > 2,000 mg/kg (Estimated)	

Toxicologically synergistic products: Not available.

Refer to the following for Irritancy of Product, Sensitization to Product, Carcinogenicity, Reproductive Toxicity, Teratogenicity, and Mutagenicity.

Hazardous components	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)	ACGIH Carcinogen
Ethyl 2-cyanoacrylate	No	No	No	No
Hydroquinone	No	No	No	Group A3

Hazardous components	LD50s and LC50s	Health Effects/Target Organs
Ethyl 2-cyanoacrylate	None	Irritant, Allergen, Respiratory
	Oral LD50 (RAT) = 320 mg/kg	Blood, Bone Marrow, Central nervous
Hydroquinone	Oral LD50 (RABBIT) = 540 mg/kg	system, Developmental, Eyes, Immune
	Dermal LD50 (RAT) = > 900 mg/kg	system, Irritant, Liver, Mutagen, Skin, Thyroid

12. ECOLOGICAL INFORMATION

Ecological information:

Not available.

13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal:

Packing group:

Exceptions:

Follow all local, state, federal and provincial regulations for disposal.

(Cyanoacrylate ester)

14. TRANSPORT INFORMATION

Canada Transportation of Dangerous Goods	- Ground
Proper shipping name:	Not regulated
Hazard class or division:	None
Identification number:	None
Packing group:	None
International Air Transportation (ICAO/IATA)	
Proper shipping name:	Aviation regulated liquid, n.o.s.
Hazard class or division:	9
Identification number:	UN 3334

9 UN 3334 III (Not more than 500ml) Unrestricted

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Water Transportation (IMO/IMDG) Proper shipping name: Hazard class or division: Identification number: Packing group:

Not regulated None None None

15. REGULATORY INFORMATION

Canada Regulatory Information

All components are listed on or are exempt from listing on the Canadian Domestic Substances List.

United States Regulatory Information

CEPA DSL/NDSL Status:

TSCA 8 (b) Inventory Status:

All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory.

16. OTHER INFORMATION

This material safety data sheet contains changes from the previous version in sections: Reviewed MSDS. Reissued with new date.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulation (CPR), and the MSDS contains all the information required by the CPR.

Prepared by: Catherine Bimler, Regulatory Affairs Specialist

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