Material Safety Data Sheet



Revision Number: 002.1



1. PRODUCT AND COMPANY IDENTIFICATION Product name: 495 Super Bonder® Instant Adhesive IDH number: 234072 Product type: Cyanoacrylate Item number: 49504 United States Region: Company address: **Contact information:** Telephone: 860.571.5100 Henkel Corporation One Henkel Way Emergency telephone: 860.571.5100 Rocky Hill, Connecticut 06067 Internet: www.henkelna.com 2. HAZARDS IDENTIFICATION EMERGENCY OVERVIEW HMIS Physical state: HEALTH: Liquid 2 Colorless to light yellow FLAMMABILITY: 2 Color: Odor: Irritating PHYSICAL HAZARD: 1 **Personal Protection:** See MSDS Section 8 WARNING: COMBUSTIBLE LIQUID AND VAPOR. MAY CAUSE EYE AND RESPIRATORY TRACT IRRITATION. BONDS SKIN IN SECONDS 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: 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. 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. 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. Existing conditions aggravated by Eye, skin, and respiratory disorders. exposure: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

See Section 11 for additional toxicological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous components
Ethyl 2-cyanoacrylate
Thickener

4. FIRST AID MEASURES

CAS NUMBER

7085-85-0

Proprietary

Inhalation:

Move to fresh air. If symptoms persist, seek medical advice.

%

60 - 100

1 - 5

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
Flash point:	80 - 93.4 °C (176°F - 200.12 °F) Tagliabue closed cup
Autoignition temperature:	485 °C (905°F)
Flammable/Explosive limits - lower:	Not determined
Flammable/Explosive limits - upper:	Not determined

FIDE FIGUEINO MEACUDEC

-

Extinguishing media: Water spray or fog. Dry powder. Carbon dioxide. Foam. 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.

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 components	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
Ethyl 2-cyanoacrylate	0.2 ppm TWA	None	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:	Observe OSHA regulations for respiratory use (29 CFR 1910.134). Use NIOSH approved respirator if there is potential to exceed exposure limit(s).			
Eye/face protection:	Safety goggles or safety glasses with side shields.			
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: 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 - lower: Flammable/Explosive limits - upper: Autoignition temperature: Evaporation rate: Solubility in water:
Evaporation rate:
Solubility in water: Solubility in water: Partition coefficient (n-octanol/water): VOC content:

Liquid Colorless to light yellow Irritating 1 - 2 ppm Not applicable < 0.2 mm hg > 300 °F (> 148.9 °C) Not determined 1.1 at 75 °F (23.89 °C) 3 Approximately 80 - 93.4 °C (176°F - 200.12 °F) Tagliabue closed cup Not determined Not determined 485 °C (905°F) Not available Polymerises in presence of water. Miscible Not applicable < 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:

Acute dermal product toxicity:

LD50 (rat) > 5,000 mg/kg (Estimated) LD50 (rabbit) > 2,000 mg/kg (Estimated)

IDH number: 234072

Product name: 495 Super Bonder® Instant Adhesive

			OSHA Carcinogen	
Hazardous components	NTP Carcinogen	IARC Carcinogen	(Specifically Regulated)	
Ethyl 2-cyanoacrylate	No	No	No	
Thickener	No	No	No	
	•		<u>.</u>	
Hazardous components		Health Effects/Target	: Organs	
Ethyl 2-cyanoacrylate		Irritant, Allergen, Res	piratory	
Thickener		Irritant		
	12. ECOLOGICAL II	NFURMATION		
Ecological information: Not known.				
	13. DISPOSAL CON	SIDERATIONS		
I	nformation provided is for u	nused product only.		
Recommended method of disposa	I: Follow all loca	I, state, federal and provincial reg	gulations for disposal.	
Hazardous waste number:	Not a RCRA h	azardous waste.		
	14. TRANSPORT IN	IFORMATION		
U.S. Department of Transportation				
Proper shipping name:	Combustible liquid,	n.o.s. (Cyanoacrylate ester)		
Hazard class or division: Identification number:	Combustible Liquid NA 1993			
Packing group:	III			
Exceptions:		Liters), Unrestricted		
•	,			
International Air Transportation (IC	<u>AO/IATA)</u>			
Proper shipping name:	•	iquid, n.o.s. (Cyanoacrylate este	۲)	
Hazard class or division:	9			
Identification number:	UN 3334			
Packing group:	None			
Exceptions:		aining less than 500ml are unregoes shipped unrestricted.	julated by this mode of	
	transport and may t			
Water Transportation (IMO/IMDG)				
Proper shipping name:	Not regulated			
Hazard class or division: Identification number:	None None			
Packing group:	None			
	None			
	15. REGULATORY I	NFORMATION		
United States Regulatory Information				
TSCA 8 (b) Inventory Status:	All components are listed o	or are exempt from listing on the	Toxic Substances Control Act	
	Inventory.			
TSCA 12(b) Export Notification:	None above reporting de m	ninimus		
CERCLA/SARA Section 302 EHS:	None above reporting de m			
	CERCLA/SARA Section 311/312: Reactive, Immediate Health, Fire, Delayed Health			
CERCLA/SARA 313:	None above reporting de m	ninimus		
California Proposition 65:	No California Proposition 65 listed chemicals are known to be present.			
Canada Regulatory Information				
 				
CEPA DSL/NDSL Status:	All components are listed on or are exempt from listing on the Canadian Domestic Substances List.			

IDH number: 234072

Product name: 495 Super Bonder® Instant Adhesive

WHMIS hazard class:

B.3, D.2.B

16. OTHER INFORMATION

This material safety data sheet contains changes from the previous version in sections: New Material Safety Data Sheet format.

Prepared by: Kyra Kozak Woods, Manager, Regulatory Affairs

DISCLAIMER: The data contained herein are furnished for information only and are believed to be reliable. However, Henkel Corporation does not assume responsibility for any results obtained by persons over whose methods Henkel Corporation 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 of Henkel Corporation's products. In light of the foregoing, Henkel Corporation specifically disclaims all warranties, express or implied, including warranties of merchantability and fitness for a particular purpose, arising from sale or use of Henkel Corporation's products. Henkel Corporation further disclaims any liability for consequential or incidental damages of any kind, including lost profits.