



Safety Data Sheet according to GB/T 16483-2008

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LOCTITE 495

SDS No. : 427632

V001.2

Revision: 20.08.2013

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1. Identification of the substance/preparation and of the company/undertaking

Product name: LOCTITE 495

Intended use: Cyanoacrylate

Company name:

Henkel (China) Investment Co., Ltd.

No.928 Zhangheng Rd.

201203 Pudong, Shanghai, P.R.China

China

Phone: +86-21-2891 8000

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Revision date: 20.08.2013

Emergency information: Emergency telephone: +86 532 8388 9090 (24h).

2. Hazards identification

Classification of the substance or mixture according to GB 13690-2009 (General rule for classification and hazard communication of chemicals):

<u>Hazard Class</u>	<u>Hazard Category</u>	<u>Route of Exposure</u>	<u>Target Organ(s)</u>
Skin corrosion/irritation	Category 3	Skin contact	
Serious eye damage/eye irritation	Category 2A	Eye contact	
Specific target organ toxicity - single exposure	Category 3		Lungs

Label elements according to GB 15258-2009 (General rules for preparation of precautionary label for chemicals):

Pictogram:



Signal word:

Warning

Hazard statement:

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

Precautionary statement (Prevention):	P261 Avoid breathing dust/fume/gas/mist/vapors/spray. P271 Use only outdoors or in a well-ventilated area. P280 Wear protective gloves/protective clothing/eye protection/face protection.
Precautionary statement (Response):	P302+P352 IF ON SKIN: Wash with plenty of soap and water. P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P312 Call a POISON CENTER or doctor/physician if you feel unwell. P332+P313 If skin irritation occurs: Get medical advice/attention. P337+P313 If eye irritation persists: Get medical advice/attention. P362 Take off contaminated clothing and wash before reuse.
Precautionary statement (Storage):	P403+P233 Store in a well-ventilated place. Keep container tightly closed.
Precautionary statement (Disposal):	P501 Dispose of contents/container according to SDS section 13.

3. Composition / information on ingredients

General description: Cyanoacrylate Adhesive

Declaration of the ingredients according to GB 13690-2009:

Hazard component CAS-No.	Concentration range	GHS Classification
Ethyl 2-cyanoacrylate 7085-85-0	60- 100 %	Serious eye irritation 2 H319 Specific target organ toxicity - single exposure 3 H335 Skin irritation 2 H315

Only hazardous ingredients for which a classification according to GB 13690-2009 is already available are displayed in this table. For full text of the Hazard statements see section 16 "Other information".

4. First aid measures

Skin contact:	Do not pull bonded skin apart. It may be gently peeled apart using a blunt object such as a spoon, preferably after soaking in warm soapy water. Cyanoacrylates give off heat on solidification. In rare cases a large drop will generate enough heat to cause a burn. Burns should be treated normally after the adhesive has been removed from the skin. If lips are accidentally stuck together apply warm water to the lips and encourage maximum wetting and pressure from saliva inside the mouth. Peel or roll lips apart. Do not try to pull the lips apart with direct opposing action.
Eye contact:	If the eye is bonded closed, release eyelashes with warm water by covering with wet pad. Cyanoacrylate will bond to eye protein and will cause periods of weeping which will help to debond the adhesive. Keep eye covered until debonding is complete, usually within 1-3 days. Do not force eye open. Medical advice should be sought in case solid particles of cyanoacrylate trapped behind the eyelid cause any abrasive damage.
Inhalation:	Move to fresh air, consult doctor if complaint persists.
Ingestion:	Ensure that breathing passages are not obstructed. The product will polymerise immediately in the mouth making it almost impossible to swallow. Saliva will slowly separate the solidified product from the mouth (several hours).

5. Fire fighting measures

Hazardous combustion products: Oxides of carbon, oxides of nitrogen, irritating organic vapors.

Extinguishing media: Foam, extinguishing powder, carbon dioxide.

Fire-fighting method: In case of fire, keep containers cool with water spray.

Notice and measures for firing fighting: Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA).

6. Accidental release measures

Emergency measures: Ensure adequate ventilation.
Do not let product enter drains.

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

Notice for handling: Ventilation (low level) is recommended when using large volumes
Use of dispensing equipment is recommended to minimise the risk of skin or eye contact

Notice for storage: For optimum shelf life store in original containers under refrigerated conditions at 2 - 8°C (35.6 - 46.4 °F)

Temp. limits storage/ transportation: 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

Hazardous components	GBZ 2.1-2007	ACGIH	NIOSH	OSHA
Ethyl 2-cyanoacrylate	none	0,2 ppm TWA		none

Engineering controls: Use positive down-draft exhaust ventilation if general ventilation is insufficient to maintain vapor concentration below established exposure limits.

Respiratory protection: Ensure adequate ventilation.

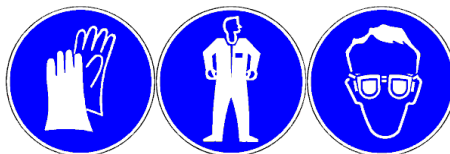
Eye protection: Wear protective glasses.

Body protection: Use nitrile gloves and aprons as necessary to prevent contact. Do not use PVC, nylon or cotton.

Hand protection: Chemical-resistant protective gloves (EN 374).
Suitable materials for short-term contact or splashes (recommended: at least protection index 2, corresponding to > 30 minutes permeation time as per EN 374):
nitrile rubber (NBR; >= 0.4 mm thickness)
Suitable materials for longer, direct contact (recommended: protection index 6, corresponding to > 480 minutes permeation time as per EN 374):
nitrile rubber (NBR; >= 0.4 mm thickness)
This information is based on literature references and on information provided by glove manufacturers, or is derived by analogy with similar substances. Please note that in practice the working life of chemical-resistant protective gloves may be considerably shorter than the permeation time determined in accordance with EN 374 as a result of the many influencing factors (e.g. temperature). If signs of wear and tear are noticed then the gloves should be replaced.

Other protection: The selection of PPE shall at least compliant with "Law of the People's Republic of China on Prevention and Control of Occupational Diseases" and "Code of practice for selection of personal protective equipments" (GB/T 11651-2008).
Good industrial hygiene practices should be observed.

Pictograms for recommended PPE:



9. Physical and chemical properties

Physical state:	liquid	Appearance:	colourless to yellowish liquid
pH:	Not available.	Melting point:	Not applicable
Flash point:	80 - 93,4 °C (176 - 200.12 °F)	Ignition temperature:	Not available.
Solubility:	Polymerizes on contact with water. (Solvent: Water)	Viscosity:	Not determined

10. Stability and reactivity

Stability:	Stable under recommended storage conditions.
Conditions to avoid:	Stable under normal conditions of storage and use.
Incompatible products:	Rapid exothermic polymerization will occur in the presence of water, amines, alkalis and alcohols.
Decomposition products:	Oxides of carbon.
Hazardous polymerization:	No information available.

11. Toxicological information

General toxicological information:

No experimental toxicological data on the preparation as such is available.

Oral toxicity:

Cyanoacrylates are considered to have relatively low toxicity. Acute oral LD50 is >5000mg/kg (rat). It is almost impossible to swallow as it rapidly polymerises in the mouth.

Other remarks:

Not available.

Acute toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Ethyl 2-cyanoacrylate 7085-85-0	LD50	> 5.000 mg/kg	oral		rat	OECD Guideline 401 (Acute Oral Toxicity)
	LD50	> 5.000 mg/kg	oral		rat	
	LD50	> 2.000 mg/kg	dermal		rabbit	OECD Guideline 401 (Acute Oral Toxicity)
	LD50	> 2.000 mg/kg	dermal		rabbit	OECD Guideline 402 (Acute Dermal Toxicity) OECD Guideline 402 (Acute Dermal Toxicity)

Skin corrosion/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
Ethyl 2-cyanoacrylate 7085-85-0	slightly irritating	24 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
Ethyl 2-cyanoacrylate 7085-85-0	slightly irritating	24 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

Serious eye damage/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
Ethyl 2-cyanoacrylate 7085-85-0	irritating	72 h	rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
Ethyl 2-cyanoacrylate 7085-85-0	irritating	72 h	rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)

Respiratory or skin sensitization:

Hazardous components CAS-No.	Result	Test type	Species	Method
Ethyl 2-cyanoacrylate 7085-85-0	not sensitising		guinea pig	
Ethyl 2-cyanoacrylate 7085-85-0	not sensitising		guinea pig	

Germ cell mutagenicity:

Hazardous components CAS-No.	Result	Type of study / Route of administration	Metabolic activation / Exposure time	Species	Method
Ethyl 2-cyanoacrylate 7085-85-0	negative negative negative negative negative	in vitro mammalian chromosome aberration test mammalian cell gene mutation assay bacterial reverse mutation assay (e.g Ames test) mammalian cell gene mutation assay in vitro mammalian chromosome aberration test bacterial reverse mutation assay (e.g Ames test)	with and without with and without with and without with and without		OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test) OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test) OECD Guideline 471 (Bacterial Reverse Mutation Assay) OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test) OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test) OECD Guideline 471 (Bacterial Reverse Mutation Assay)

12. Ecological information

General ecological information:

Do not empty into drains / surface water / ground water.

Ecotoxicity:

No data available.

Persistence and degradability:**Ultimate biodegradation:**

Not available.

Bioaccumulative potential:

No data available.

Other adverse effects:

Not available.

Persistence and degradability:

Hazardous components CAS-No.	Result	Route of application	Degradability	Method

Ethyl 2-cyanoacrylate 7085-85-0		aerobic	57 %	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)
		aerobic	57 %	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)

Bioaccumulative potential / Mobility in soil:

Hazardous components CAS-No.	LogKow	Bioconcentration factor (BCF)	Exposure time	Species	Temperature	Method
Ethyl 2-cyanoacrylate 7085-85-0	0,776				22 °C	EU Method A.8 (Partition Coefficient)
	0,776				22 °C	EU Method A.8 (Partition Coefficient)

13. Disposal considerations**Product disposal:**

If the waste is classified as hazardous waste according to GB 5085.7-2007 (Identification standards for hazardous wastes, General Specifications). Dispose of as hazardous waste in compliance with "Regulation on the Safety Management of Hazardous Chemicals", "Law of the People's Republic of China on the prevention and control of Environmental Pollution by Solid Waste", "National Catalogue of Hazardous Waste".

Disposal of uncleaned packages:

After use, tubes, cartons and bottles containing residual product should be disposed of as chemically contaminated waste in an authorised legal land fill site or incinerated. Disposal must be made according to official regulations.

14. Transport information**Road transport ADR:**

Not dangerous goods

Railroad transport RID:

Not dangerous goods

Marine transport IMDG:

Not dangerous goods

Air transport IATA:

Class:	9
Packaging group:	III
Packaging instructions (passenger):	964
Packaging instructions (cargo):	964
UN no.:	3334
Label:	9
Proper shipping name:	Aviation regulated liquid, n.o.s. (Cyanoacrylate ester)
Additional Information:	Primary packs containing less than 500ml are unregulated by this mode of transport and may be shipped unrestricted.

Notice For Transportation:

Transport according to local and national regulations. Ensure containers will not leak, collapse, or being damaged when transported. DO NOT transport with incompatible materials. Transportation vehicle should be equipped with right fire-fighting equipment in case of emergency. Avoid solarization, drenched and high temperature when transported.

15. Regulations - classification and identification

The following laws and regulations lay down provisions in terms of chemicals safety use, storage, transportation, loading/unloading, classification as well as symbol.

“Law of the People's Republic of China on Work Safety” (Adopted by the 28th meeting of 9th NPC standing committee on 29th June 2002).

"Law of the People's Republic of China on the Prevention and Treatment of Occupational Diseases" (Adopted by the 24th meeting of 11th NPC standing committee on 31st December 2011)

“Law of the People's Republic of China on environmental protection” (Adopted by 11st meeting of 7th NPC standing committee on 26th December 1989).

“Regulation on the Safety Management of Hazardous Chemicals” (Adopted by 144th State Council executive meeting on 16th February 2011).

“Regulations on License to Work Safety” (Adopted by 34th State Council executive meeting on 7th January 2004).

China Inventory of Existing Chemicals:

All components are listed or are exempt from Inventory of Existing Chemical Substances in China.

16. Other information

Issue date:

31.01.2018

Issue department:

Dayong Tian, Product Safety & Regulatory Affairs Specialist for Greater China

Disclaimer:

This information is based on our current level of knowledge and relates to the product in the state in which it is delivered. It is intended to describe our products from the point of view of safety requirements and is not intended to guarantee any particular properties. 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.

Others:

The full text of all abbreviations indicated by codes in this safety data sheet section 3 are as follows:

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.