

Safety Data Sheet according to (EC) No 1907/2006 - ISO 11014-1

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SDS no.: 153522

V001.6 Revision: 31.01.2008

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Loctite 480

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

Trade name:

Loctite 480

Intended use:

Cyanoacrylate

Company name:

Henkel Limited Technologies House Wood Lane End

HP2 4RQ Hemel Hempstead

Great Britain

Phone: +44 (0)1442 278000 Fax-no.: +44 (0)1442 278071

E-mail address of person responsible for Safety Data Sheet:

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Emergency information:

24 Hours Emergency Tel: +44(0)8701906777

2. Hazards identification

R36/37/38 Irritating to eyes, respiratory system and skin.

3. Composition / information on ingredients

General chemical description:

Cyanoacrylate Adhesive

Declaration of ingredients according to EC/1907/2006:

Hazardous components	EINECS	content	Classification	
CAS-No.	ELINCS			
Ethyl 2-cyanoacrylate	230-391-5	> 80 - < 100 %	Xi - Irritant; R36/37/38	
7085-85-0				
Hydrochinon	204-617-8	> 0,1 -< 0,5 %	carcinogenic, category 3; Xn - Harmful; R40	
123-31-9			Mutagen category 3.; Xn - Harmful; R68	
			Xn - Harmful; R22	
			Xi - Irritant; R41	
			Xi - Irritant; R43	
			N - Dangerous for the environment; R50	
Phthalic anhydride	201-607-5	> 0,1 - <= 0,5 %	Xn - Harmful; R22	
85-44-9			Xi - Irritant; R37/38, R41	
			Xn - Harmful; R42/43	

For full text of the R-Phrases indicated by codes see section 16 'Other Information'.

Substances without classification may have community workplace exposure limits available.

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4. First aid measures

Inhalation:

Move to fresh air, consult doctor if complaint persist.

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.

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

Suitable extinguishing media:

foam, extinguishing powder, carbon dioxide fine water spray

Special protection equipment for firefighters:

Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA).

Hazardous combustion products:

Oxides of carbon, oxides of nitrogen, irritating organic vapors.

6. Accidental release measures

Personal precautions:

Ensure adequate ventilation.

Environmental precautions:

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

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

Storage:

For optimum shelf life store in original containers under refrigerated conditions at 2 - 8° C (35.6 - 46.4 $^{\circ}$ F)

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8. Exposure controls / personal protection

Components with specific control parameters for workplace:

Valid for

Great Britain

Basis

UK EH40 WELs

Ingredient	ppm	mg/m ³	Туре	Category	Remarks
ETHYL CYANOACRYLATE 7085-85-0	0,3	1,5	Short Term Exposure Limit (STEL):		EH40 WEL
ETHYL CYANOACRYLATE 7085-85-0				Listed.	EH40 WEL
PHTHALIC ANHYDRIDE 85-44-9		4	Time Weighted Average (TWA).		EH40 WEL
PHTHALIC ANHYDRIDE 85-44-9		12	Short Term Exposure Limit (STEL):		EH40 WEL
PHTHALIC ANHYDRIDE 85-44-9				Listed.	EH40 WEL
HYDROQUINONE 123-31-9		0,5	Time Weighted Average (TWA).		EH40 WEL

Respiratory protection:

Ensure adequate ventilation.

Hand protection:

In circumstances where there is a potential for prolonged or repeated skin contact, the use of polyvinyl chloride or nitrile rubber gauntlets or equivalent solvent resistant gloves is recommended.

The use of chemical resistant gloves such as Nitrile are recommended

Eye protection:

Wear protective glasses.

General protection and hygiene measures:

Good industrial hygiene practices should be observed

9. Physical and chemical properties

General characteristics:

Appearance liquid black
Odor: irritating

Phys./chem. properties:

Boiling point > 149 °C (> 300.2 °F) Flash point 80 - 93,4 °C (176 - 200.12 °F)

Vapor pressure 0,6 mbar $(25 \,^{\circ}\text{C} \, (77 \,^{\circ}\text{F}))$ Density 1,1 g/cm3

(20 °C (68 °F))

Solubility (qualitative) Polymerises in presence of water (Solvent: Water)

Solubility (qualitative) miscible (Solvent: Acetone)
VOC content < 3,00 %

(1999/13/EC)

10. Stability and reactivity

Conditions to avoid:

Stable under normal conditions of storage and use.

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Materials to avoid:

Rapid exothermic polymerization will occur in the presence of water, amines, alkalis and alcohols.

11. Toxicological information

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.

Inhalative toxicity:

Irritating to respiratory system

Prolonged exposure to high concentrations of vapours may lead to chronic effects in sensitive individuals In dry atmosphere with < 50% humidity, vapours may irritate the eyes and respiratory system

Skin irritation:

Irritating to the skin

Bonds skin in seconds. Considered to be of low toxicity: acute dermal LD50 (rabbit)>2000mg/kg

Due to polymerisation at the skin surface allergic reaction is unlikely to occur

Eye irritation:

Irritating to eyes.

Liquid product will bond eyelids. In a dry atmosphere (RH<50%) vapours may cause irritation and lachrymatory effect

12. Ecological information

Mobility:

Cured adhesives are immobile.

General ecological information:

Biological and Chemical Oxygen Demands (BOD and COD) are insignificant.

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

13. Disposal considerations

Product disposal:

Cured adhesive: Dispose of as water insoluble non-toxic solid chemical in authorised landfill or incinerate under controlled conditions.

Dispose of in accordance with local and national regulations.

Contribution of this product to waste is very insignificant in comparison to article in which it is used

Waste code(EWC):

08 04 09 waste adhesives and sealants containing organic solvents and other dangerous substances

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

Inland water transport ADN:

Not dangerous goods

Marine transport IMDG:

Not dangerous goods

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Air transport IATA:

Class: 9

Packaging group:

Packaging instructions (passenger) 906
Packaging instructions (cargo) 906
UN no.: 3334
Label: 9

Proper shipping name: Aviation regulated liquid n.o.s. (Cyanoacrylate ester)

Primary packs containing less than 500ml are unregulated by this mode of transport and may be shipped unrestricted.

15. Regulations - classification and identification

Indication of danger:

Xi - Irritant



Risk phrases:

R36/37/38 Irritating to eyes, respiratory system and skin.

Safety phrases:

S23 Do not breathe vapour.

S24/25 Avoid contact with skin and eyes.

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Additional labeling:

Cyanoacrylate. Danger. Bonds skin and eyes in seconds. Keep out of the reach of children.

Contains Hydrochinon. May produce an allergic reaction.

Contains Phthalic anhydride. May produce an allergic reaction.

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16. Other information

The labelling of the product is indicated in Section 15. The full text of the R-phrases indicted by codes in this safety data sheet are as follows:

R22 Harmful if swallowed.

R36/37/38 Irritating to eyes, respiratory system and skin.

R37/38 Irritating to respiratory system and skin.

R40 Limited evidence of a carcinogenic effect.

R41 Risk of serious damage to eyes.

R42/43 May cause sensitization by inhalation and skin contact.

R43 May cause sensitization by skin contact.

R50 Very toxic to aquatic organisms.

R68 Possible risk of irreversible effects.

Further information:

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.

This safety data sheet was prepared in accordance with Council Directive 67/548/EEC and it's subsequent amendments, and Commission Directive 1999/45/EC.