

# Safety Data Sheet according to (EC) No 1907/2006

Page 1 of 15

Loctite 382

SDS No.: 153623 V004.1 Revision: 25.05.2015 printing date: 21.04.2016 Replaces version from: 17.04.2015

# SECTION 1: Identification of the substance/mixture and of the company/undertaking

# 1.1. Product identifier

Loctite 382

# **Contains:**

Ethyl 2-cyanoacrylate

# **1.2. Relevant identified uses of the substance or mixture and uses advised against** Intended use:

Adhesive

# 1.3. Details of the supplier of the safety data sheet

Henkel Ireland Operations and Research Limited Tallaght Business Park Dublin 24

Ireland

Phone:	+353 (14046444)
Fax-no.:	+353 (14519926)

ua-productsafety.uk@uk.henkel.com

# **1.4. Emergency telephone number**

24 Hours Emergency Tel: +44 (0)1442 278497

# **SECTION 2: Hazards identification**

### 2.1. Classification of the substance or mixture

Classification (CLP):	
Skin irritation	Category 2
H315 Causes skin irritation.	
Serious eye irritation	Category 2
H319 Causes serious eye irritation.	
Specific target organ toxicity - single exposure	Category 3
H335 May cause respiratory irritation.	
Target organ: respiratory tract irritation	

## 2.2. Label elements

Label elements (CLP):

Hazard pictogram:	
Signal word:	Warning
Hazard statement:	H315 Causes skin irritation. H319 Causes serious eye irritation. H335 May cause respiratory irritation.
Supplemental information	EUH202 Cyanoacrylate. Danger. Bonds skin and eyes in seconds. Keep out of the reach of children. Contains Phthalic anhydride. May produce an allergic reaction.
Precautionary statement: Prevention	P261 Avoid breathing vapours. P280 Wear protective gloves/eye protection.
Precautionary statement: Response	P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to remove. Continue rinsing. P337+P313 If eye irritation persists: Get medical advice/attention.
Precautionary statement: Disposal	P501 Dispose of waste and residues in accordance with local authority requirements.

**2.3. Other hazards** None if used properly.

# SECTION 3: Composition/information on ingredients

# 3.2. Mixtures

General chemical description: Cyanoacrylate Adhesive

Hazardous components	EC Number	content	Classification
CAS-No.	REACH-Reg No.		
Ethyl 2-cyanoacrylate 7085-85-0	230-391-5 01-2119527766-29	50- 100 %	Eye Irrit. 2 H319 STOT SE 3 H335 Skin Irrit. 2 H315
Phthalic anhydride 85-44-9	201-607-5 01-2119457017-41	0,1- < 1 %	Acute Tox. 4; Oral H302 STOT SE 3 H335 Skin Irrit. 2 H315 Eye Dam. 1 H318 Resp. Sens. 1 H334 Skin Sens. 1 H317
Bis(2-hydroxy-3-tert-butyl-5- methylphenyl)methane 119-47-1	204-327-1 01-2119496065-33	0,1-< 0,5 %	Repr. 2 H361 Aquatic Chronic 4 H413
Hydroquinone 123-31-9	204-617-8 01-2119524016-51	0,01-< 0,1 %	Aquatic Acute 1 H400 Aquatic Chronic 1 H410 Carc. 2 H351 Muta. 2 H341 Acute Tox. 4; Oral H302 Eye Dam. 1 H318 Skin Sens. 1 H317 M factor: 10

# Declaration of the ingredients according to CLP (EC) No 1272/2008:

For full text of the H - statements and other abbreviations see section 16 "Other information". Substances without classification may have community workplace exposure limits available.

# **SECTION 4: First aid measures**

# 4.1. Description of first aid measures

Inhalation:

Move to fresh air, consult doctor if complaint persists.

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.

Seek medical advice.

#### 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).

#### 4.2. Most important symptoms and effects, both acute and delayed

EYE: Irritation, conjunctivitis.

SKIN: Redness, inflammation.

RESPIRATORY: Irritation, coughing, shortness of breath, chest tightness.

#### 4.3. Indication of any immediate medical attention and special treatment needed

See section: Description of first aid measures

# **SECTION 5: Firefighting measures**

# 5.1. Extinguishing media

**Suitable extinguishing media:** Foam, extinguishing powder, carbon dioxide. Fine water spray

#### Extinguishing media which must not be used for safety reasons: None known

None known

#### 5.2. Special hazards arising from the substance or mixture

In case of fire, keep containers cool with water spray. Oxides of carbon, oxides of nitrogen, irritating organic vapors.

#### 5.3. Advice for firefighters

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

#### Additional information:

In case of fire, keep containers cool with water spray.

# **SECTION 6: Accidental release measures**

**6.1. Personal precautions, protective equipment and emergency procedures** Ensure adequate ventilation.

#### **6.2.** Environmental precautions

Do not let product enter drains.

#### 6.3. Methods and material for containment and cleaning up

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.

# 6.4. Reference to other sections

See advice in section 8

# **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe 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

## Hygiene measures:

Wash hands before work breaks and after finishing work. Do not eat, drink or smoke while working. Good industrial hygiene practices should be observed.

## 7.2. Conditions for safe storage, including any incompatibilities

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

# 7.3. Specific end use(s)

Adhesive

# **SECTION 8: Exposure controls/personal protection**

# 8.1. Control parameters

# **Occupational Exposure Limits**

## Valid for

Great Britain

Ingredient [Regulated substance]	ppm	mg/m <sup>3</sup>	Value type	Short term exposure limit category / Remarks	Regulatory list
Ethyl 2-cyanoacrylate 7085-85-0 [ETHYL CYANOACRYLATE]	0,3	1,5	Short Term Exposure Limit (STEL):		EH40 WEL
Phthalic anhydride 85-44-9 [PHTHALIC ANHYDRIDE]		12	Short Term Exposure Limit (STEL):		EH40 WEL
Phthalic anhydride 85-44-9 [PHTHALIC ANHYDRIDE]		4	Time Weighted Average (TWA):		EH40 WEL
Hydroquinone 123-31-9 [HYDROQUINONE]		0,5	Time Weighted Average (TWA):		EH40 WEL

# Predicted No-Effect Concentration (PNEC):

Name on list	Environmental Compartment	Exposure period	Value		Remarks		
			mg/l ppm mg/kg			others	
Phthalic anhydride	soil				0,173		
85-44-9					mg/kg		
Phthalic anhydride	STP					10 mg/L	
85-44-9						-	
Phthalic anhydride	sediment				3,8 mg/kg		
85-44-9	(freshwater)						
Phthalic anhydride	sediment				0,38 mg/kg		
85-44-9	(marine water)						
Phthalic anhydride	aqua (marine					0,1 mg/L	
85-44-9	water)						
Phthalic anhydride	aqua					5,6 mg/L	
85-44-9	(intermittent					_	
	releases)						
Phthalic anhydride	aqua					1 mg/L	
85-44-9	(freshwater)						
Hydroquinone	aqua					0,114 µg/L	
123-31-9	(freshwater)						
Hydroquinone	aqua (marine					0,0114 µg/L	
123-31-9	water)						
Hydroquinone	sediment					0,98 µg/kg	
123-31-9	(freshwater)						
Hydroquinone	sediment					0,097 µg/kg	
123-31-9	(marine water)						
Hydroquinone	aqua					0,00134 mg/L	
123-31-9	(intermittent						
	releases)						
Hydroquinone	soil					0,129 µg/kg	
123-31-9							
Hydroquinone	STP					0,71 mg/L	
123-31-9							

# **Derived No-Effect Level (DNEL):**

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
Ethyl 2-cyanoacrylate 7085-85-0	Workers	Inhalation	Long term exposure - local effects		9,25 mg/m3	
Ethyl 2-cyanoacrylate 7085-85-0	Workers	Inhalation	Long term exposure - systemic effects		9,25 mg/m3	
Ethyl 2-cyanoacrylate 7085-85-0	general population	Inhalation	Long term exposure - local effects		9,25 mg/m3	
Ethyl 2-cyanoacrylate 7085-85-0	general population	Inhalation	Long term exposure - systemic effects		9,25 mg/m3	
Phthalic anhydride 85-44-9	Workers	inhalation	Long term exposure - systemic effects		32,2 mg/m3	
Phthalic anhydride 85-44-9	Workers	Dermal	Long term exposure - systemic effects		10 mg/kg bw/day	
Phthalic anhydride 85-44-9	general population	inhalation	Long term exposure - systemic effects		8,6 mg/m3	
Phthalic anhydride 85-44-9	general population	Dermal	Long term exposure - systemic effects		5 mg/kg bw/day	
Phthalic anhydride 85-44-9	general population	oral	Long term exposure - systemic effects		5 mg/kg bw/day	
Hydroquinone 123-31-9	Workers	Dermal	Long term exposure - systemic effects		128 mg/kg bw/day	
Hydroquinone 123-31-9	Workers	Inhalation	Long term exposure - systemic effects		7 mg/m3	
Hydroquinone 123-31-9	Workers	Inhalation	Long term exposure - local effects		1 mg/m3	
Hydroquinone 123-31-9	general population	Dermal	Long term exposure - systemic effects		64 mg/kg bw/day	
Hydroquinone 123-31-9	general population	Inhalation	Long term exposure - systemic effects		1,74 mg/m3	
Hydroquinone 123-31-9	general population	Inhalation	Long term exposure - local effects		0,5 mg/m3	

**Biological Exposure Indices:** None

## 8.2. Exposure controls:

Respiratory protection:

Ensure adequate ventilation. An approved mask or respirator fitted with an organic vapour cartridge should be worn if the product is used in a poorly ventilated area Filter type: A

Hand protection:

The use of chemical resistant gloves such as Nitrile is recommended.

Polyethylene or polypropylene gloves are recommended when using large volumes.

Do not use PVC, rubber or nylon gloves.

Please note that in practice the working life of chemical resistant gloves may be considerably reduced as a result of many influencing factors (e.g. temperature). Suitable risk assessment should be carried out by the end user. If signs of wear and tear are noticed then the gloves should be replaced.

Eye protection: Wear protective glasses.

Skin protection: Wear suitable protective clothing.

# **SECTION 9: Physical and chemical properties**

liquid

## 9.1. Information on basic physical and chemical properties

Appearance Odor

Odour threshold

# pН

Initial boiling point Flash point Decomposition temperature Vapour pressure Vapour pressure (50 °C (122 °F)) Density (20 °C (68 °F)) Bulk density Viscosity Viscosity (kinematic) Explosive properties Solubility (qualitative) (Solvent: Water) Solubility (qualitative) (Solvent: Acetone) Solidification temperature Melting point Flammability Auto-ignition temperature Explosive limits Partition coefficient: n-octanol/water Evaporation rate Vapor density Oxidising properties

# colourless irritating No data available / Not applicable

No data available / Not applicable > 149 °C (> 300.2 °F) 80 - 93 °C (176 - 199.4 °F); None No data available / Not applicable 0,3 mbar < 700 mbar

1,1 g/cm3

No data available / Not applicable Polymerises in presence of water.

## Soluble

No data available / Not applicable No data available / Not applicable

#### 9.2. Other information

No data available / Not applicable

# **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

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

#### 10.2. Chemical stability

Stable under recommended storage conditions.

# 10.3. Possibility of hazardous reactions

See section reactivity

# **10.4.** Conditions to avoid

Stable under normal conditions of storage and use.

#### **10.5. Incompatible materials**

See section reactivity

#### 10.6. Hazardous decomposition products

None if used for intended purpose.

# **SECTION 11: Toxicological information**

# 11.1. Information on toxicological effects

# General toxicological information:

The mixture is classified based on the available hazard information for the ingredients as defined in the classification criteria for mixtures for each hazard class or differentiation in Annex I to Regulation 1272/2008/EC. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.

# STOT-single exposure:

May cause respiratory irritation.

# 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.

# Skin irritation:

Causes skin irritation.

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:

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

# Acute oral 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)
Phthalic anhydride 85-44-9	LD50	1.530 mg/kg	oral		rat	
Bis(2-hydroxy-3-tert- butyl-5- methylphenyl)methane 119-47-1	LD50	> 10.000 mg/kg	oral		rat	
Hydroquinone 123-31-9	LD50	367 mg/kg	oral		rat	OECD Guideline 401 (Acute Oral Toxicity)

# Acute dermal toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Ethyl 2-cyanoacrylate 7085-85-0	LD50	> 2.000 mg/kg	dermal		rabbit	OECD Guideline 402 (Acute Dermal Toxicity)
Phthalic anhydride 85-44-9	LD50	> 10.000 mg/kg	dermal		rabbit	

#### 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)

# 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)
Phthalic anhydride 85-44-9	highly irritating		rabbit	

# Respiratory or skin sensitization:

Hazardous components CAS-No.	Result	Test type	Species	Method
Ethyl 2-cyanoacrylate 7085-85-0	not sensitising		guinea pig	
Phthalic anhydride 85-44-9	sensitising	in vivo	guinea pig	
Phthalic anhydride 85-44-9	sensitising	Mouse local lymphnod e assay (LLNA)	mouse	Mouse local lymphnode assay (LLNA)
Hydroquinone 123-31-9	sensitising	Guinea pig maximisat ion test	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	bacterial reverse mutation assay (e.g Ames test)			OECD Guideline 471 (Bacterial Reverse Mutation Assay)
	negative	mammalian cell gene mutation assay	with and without		OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)
	negative	in vitro mammalian chromosome aberration test	with and without		OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)
Phthalic anhydride 85-44-9	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		
Bis(2-hydroxy-3-tert- butyl-5- methylphenyl)methane 119-47-1	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Hydroquinone 123-31-9	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		EU Method B.13/14 (Mutagenicity)

# **Reproductive toxicity:**

Hazardous substances CAS-No.	Result / Classification	Species	Exposure time	Species	Method
Bis(2-hydroxy-3-tert- butyl-5- methylphenyl)methane 119-47-1	NOAEL P = 12,5 mg/kg	screening oral: gavage		rat	OECD Guideline 421 (Reproduction / Developmental Toxicity Screening Test)

# **Repeated dose toxicity**

Hazardous components CAS-No.	Result	Route of application	Exposure time / Frequency of treatment	Species	Method
Hydroquinone 123-31-9	NOAEL=>= 250 mg/kg	) oral: gavage	14 days5 days/week. 12 doses	rat	OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity in Rodents)
Hydroquinone 123-31-9	LOAEL=<= 500 mg/kg	) oral: gavage	14 days5 days/week. 12 doses	rat	OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity in Rodents)

# **SECTION 12: Ecological information**

# General ecological information:

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

The mixture is classified based on the available hazard information for the ingredients as defined in the classification criteria for mixtures for each hazard class or differentiation in Annex I to Regulation 1272/2008/EC. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.

# 12.1. Toxicity

# **Ecotoxicity:**

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

Hazardous components CAS-No.	Value type	Value	Acute Toxicity Study	Exposure time	Species	Method
Phthalic anhydride 85-44-9	LC50	313 mg/l	Fish	48 h	Leuciscus idus	DIN 38412-15
Phthalic anhydride 85-44-9	EC50	68 mg/l	Algae	72 h	Selenastrum sp.	OECD Guideline 201 (Alga, Growth Inhibition Test)
Hydroquinone 123-31-9	LC50	0,638 mg/l	Fish	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish, Acute Toxicity Test)
Hydroquinone 123-31-9	EC50	0,134 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Hydroquinone 123-31-9	EC50	0,335 mg/l	Algae	72 h	Selenastrum capricornutum (new name: Pseudokirchnerella subcapitata)	OECD Guideline 201 (Alga, Growth Inhibition Test)
Hydroquinone 123-31-9	NOEC	0,0057 mg/l	chronic Daphnia	21 d	Daphnia magna	OECD 211 (Daphnia magna, Reproduction Test)

# 12.2. Persistence and degradability

# **Persistence and Biodegradability:** No data available for the product.

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)
Phthalic anhydride 85-44-9		aerobic	90 %	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)
Bis(2-hydroxy-3-tert-butyl-5- methylphenyl)methane 119-47-1	under test conditions no biodegradation observ		0 %	OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)
Hydroquinone 123-31-9	readily biodegradable	aerobic	75 - 81 %	EU Method C.4-E (Determination of the "Ready" BiodegradabilityClosed Bottle Test)

# 12.3. Bioaccumulative potential / 12.4. Mobility in soil

# Mobility:

Cured adhesives are immobile.

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)
Phthalic anhydride 85-44-9	1,6					
Bis(2-hydroxy-3-tert-butyl-5- methylphenyl)methane 119-47-1	6,24					
Hydroquinone 123-31-9	0,59					EU Method A.8 (Partition Coefficient)

# 12.5. Results of PBT and vPvB assessment

Hazardous components	PBT/vPvB
CAS-No.	

Phthalic anhydride 85-44-9	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
Bis(2-hydroxy-3-tert-butyl-5- methylphenyl)methane 119-47-1	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
Hydroquinone 123-31-9	Not fulfilling PBT (persistent/bioaccummulative/toxic) criteria

#### 12.6. Other adverse effects

No data available.

# **SECTION 13: Disposal considerations**

## **13.1.** Waste treatment methods

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

# 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.

Waste code

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

# **SECTION 14: Transport information**

14.1.	UN numbe	r
	ADR	Not dangerous goods
	RID	Not dangerous goods
	ADN	Not dangerous goods
	IMDG	Not dangerous goods
	IATA	3334
14.2.	UN proper	shipping name
	ADR	Not dangerous goods
	RID	Not dangerous goods
	ADN	Not dangerous goods
	IMDG	Not dangerous goods
	IATA	Aviation regulated liquid, n.o.s. (Cyanoacrylate ester)
14.3.	<b>Transport</b>	hazard class(es)
	ADR	Not dangerous goods
	RID	Not dangerous goods
	ADN	Not dangerous goods
	IMDG	Not dangerous goods
	IATA	9
14.4.	Packaging	group
	ADR	Not dangerous goods
	RID	Not dangerous goods
	ADN	Not dangerous goods
	IMDG	Not dangerous goods
	IATA	III
14.5.	Environme	ntal hazards
	ADR	not applicable
	RID	not applicable
	ADN	not applicable
	IMDG	not applicable
	IATA	not applicable
14.6.	Special pre	cautions for user
	ADR	not applicable
	RID	not applicable
	ADN	not applicable
	IMDG	not applicable
	IATA	Primary packs containing less than 500ml are unregulated by this mode of transport and may be shipped unrestricted.
14.7.	<b>Transport</b> i	in bulk according to Annex II of MARPOL 73/78 and the IBC Code
	not applicab	Ja

not applicable

# **SECTION 15: Regulatory information**

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

VOC content (1999/13/EC) < 3 %

# 15.2. Chemical safety assessment

A chemical safety assessment has been carried out.

# **SECTION 16: Other information**

The labelling of the product is indicated in Section 2. The full text

of all abbreviations indicated by codes in this safety data sheet are as follows:

H302 Harmful if swallowed.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H335 May cause respiratory irritation.

H341 Suspected of causing genetic defects.

H351 Suspected of causing cancer. H361 Suspected of damaging fertility or the unborn child.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

H413 May cause long lasting harmful effects to aquatic life.

#### **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.

# Label elements (DPD):

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 Phthalic anhydride. May produce an allergic reaction.

Relevant changes in this safety data sheet are indicated by vertical lines at the left margin in the body of this document. Corresponding text is displayed in a different color on shadowed fields.

# **Annex - Exposure Scenarios:**

Exposure Scenarios for ethyl 2-cyanoacrylate can be downloaded under the following link: http://mymsds.henkel.com/mymsds/.470833..en.ANNEX\_DE.15743123.0.DE.pdf Alternatively they can be accessed on the internet site www.mymsds.henkel.com by entering number 470833.



# Safety Data Sheet according to (EC) No 1907/2006

Page 1 of 10

Loctite 7455

SDS No. : 179508 V006.2 Revision: 26.05.2015 printing date: 21.04.2016 Replaces version from: 13.05.2014

# SECTION 1: Identification of the substance/mixture and of the company/undertaking

# 1.1. Product identifier

Loctite 7455

# **Contains:**

Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

**1.2. Relevant identified uses of the substance or mixture and uses advised against** Intended use:

Primer

# 1.3. Details of the supplier of the safety data sheet

Henkel Ireland Operations and Research Limited Tallaght Business Park Dublin 24

Ireland

Phone:	+353 (14046444)
Fax-no.:	+353 (14519926)

ua-productsafety.uk@uk.henkel.com

# 1.4. Emergency telephone number

24 Hours Emergency Tel: +44 (0)1442 278497

# **SECTION 2: Hazards identification**

### 2.1. Classification of the substance or mixture

Classification (CLP):	
Flammable aerosol.	Category 1
H222 Extremely flammable aerosol.	
H229 Pressurised container: May burst if heated.	
Skin irritation	Category 2
H315 Causes skin irritation.	
Specific target organ toxicity - single exposure	Category 3
H336 May cause drowsiness or dizziness.	
Target organ: Central Nervous System	
Chronic hazards to the aquatic environment	Category 2
H411 Toxic to aquatic life with long lasting effects.	

# 2.2. Label elements

Label elements (CLP):

Hazard pictogram:	
Signal word:	Danger
Hazard statement:	<ul> <li>H222 Extremely flammable aerosol.</li> <li>H229 Pressurised container: May burst if heated.</li> <li>H315 Causes skin irritation.</li> <li>H336 May cause drowsiness or dizziness.</li> <li>H411 Toxic to aquatic life with long lasting effects.</li> </ul>
Precautionary statement:	<ul> <li>P251 Do not pierce or burn, even after use.</li> <li>P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.</li> <li>P211 Do not spray on an open flame or other ignition source.</li> <li>P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.</li> <li>No smoking.</li> <li>P102 Keep out of reach of children.</li> </ul>
Precautionary statement: Prevention	P261 Avoid breathing spray. P273 Avoid release to the environment.
Precautionary statement: Response	P302+P352 IF ON SKIN: Wash with plenty of water.

# 2.3. Other hazards

Solvents contained in the product evaporate during processing and their vapors can form explosive/highly inflammable air/vapor mixtures.

**SECTION 3: Composition/information on ingredients** 

# 3.2. Mixtures

General chemical description: Primer

# Declaration of the ingredients according to CLP (EC) No 1272/2008:

Hazardous components CAS-No.	EC Number REACH-Reg No.	content	Classification
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics 93924-37-9	300-230-4 01-2119475515-33	>= 75- < 100 %	Asp. Tox. 1 H304 Skin Irrit. 2 H315 Flam. Liq. 2 H225 STOT SE 3; Inhalation H336 Aquatic Chronic 2 H411
Propane 74-98-6	200-827-9 01-2119486944-21	>= 10-< 25 %	Flam. Gas 1 H220 Press. Gas H280
N,N-Dimethyl-p-toluidine 99-97-8	202-805-4	>= 0,3-< 1%	STOT RE 2 H373 Aquatic Chronic 3 H412 Acute Tox. 3; Inhalation H331 Acute Tox. 3; Dermal H311 Acute Tox. 3; Oral H301

For full text of the H - statements and other abbreviations see section 16 "Other information". Substances without classification may have community workplace exposure limits available.

# **SECTION 4: First aid measures**

#### 4.1. Description of first aid measures

Inhalation:

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

Skin contact: Rinse with running water and soap. Obtain medical attention if irritation persists.

Eye contact:

Rinse immediately with plenty of running water (for 10 minutes), seek medical attention from a specialist.

Ingestion: Rinse mouth, drink 1-2 glasses of water, do not induce vomiting, consult a doctor.

#### 4.2. Most important symptoms and effects, both acute and delayed SKIN: Redness, inflammation.

Vapors may cause drowsiness and dizziness.

Prolonged or repeated contact may cause eye irritation.

4.3. Indication of any immediate medical attention and special treatment needed See section: Description of first aid measures

# **SECTION 5: Firefighting measures**

#### 5.1. Extinguishing media Suitable extinguishing media:

Foam, extinguishing powder, carbon dioxide.

**Extinguishing media which must not be used for safety reasons:** None known

# 5.2. Special hazards arising from the substance or mixture

In case of fire, keep containers cool with water spray. Oxides of carbon, oxides of nitrogen, irritating organic vapors. In case of fire toxic gases can be released.

#### **5.3.** Advice for firefighters

Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear.

Additional information: In case of fire, keep containers cool with water spray.

#### **SECTION 6: Accidental release measures**

#### 6.1. Personal precautions, protective equipment and emergency procedures

Avoid skin and eye contact. Remove sources of ignition. Ensure adequate ventilation.

#### **6.2. Environmental precautions**

Do not let product enter drains.

#### 6.3. Methods and material for containment and cleaning up

Wipe up using absorbent material. Store in a partly filled, closed container until disposal.

#### 6.4. Reference to other sections

See advice in section 8

# **SECTION 7: Handling and storage**

# 7.1. Precautions for safe handling

Avoid skin and eye contact. Keep away from sources of ignition - no smoking.

Vapours should be extracted to avoid inhalation.

## Hygiene measures:

Wash hands before work breaks and after finishing work. Do not eat, drink or smoke while working. Good industrial hygiene practices should be observed.

# 7.2. Conditions for safe storage, including any incompatibilities

Store in a cool, dry place. Do not store near sources of heat or ignition, or reactive materials.

#### **7.3. Specific end use(s)** Primer

#### 8.1. Control parameters

#### **Occupational Exposure Limits**

Valid for

Great Britain

None

## Derived No-Effect Level (DNEL):

Name on list	Application	Route of	Health Effect	Exposure	Value	Remarks
	Area	Exposure		Time		
Hydrocarbons, C7, n-alkanes, isoalkanes,	Workers	Dermal	Long term		300 mg/kg bw/day	
cyclics			exposure -			
93924-37-9			systemic effects			
Hydrocarbons, C7, n-alkanes, isoalkanes,	Workers	Inhalation	Long term		2085 mg/m3	
cyclics			exposure -			
93924-37-9			systemic effects			
Hydrocarbons, C7, n-alkanes, isoalkanes,	general	Dermal	Long term		149 mg/kg bw/day	
cyclics	population		exposure -			
93924-37-9			systemic effects			
Hydrocarbons, C7, n-alkanes, isoalkanes,	general	oral	Long term		149 mg/kg bw/day	
cyclics	population		exposure -			
93924-37-9			systemic effects			
Hydrocarbons, C7, n-alkanes, isoalkanes,	general	Inhalation	Long term		477 mg/m3	
cyclics	population		exposure -		-	
93924-37-9			systemic effects			

**Biological Exposure Indices:** 

None

#### 8.2. Exposure controls:

Respiratory protection:

Ensure adequate ventilation.

An approved mask or respirator fitted with an organic vapour cartridge should be worn if the product is used in a poorly ventilated area Filter type: A

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.

Eye protection: Wear protective glasses.

Skin protection: Suitable protective clothing

# **SECTION 9: Physical and chemical properties**

# 9.1. Information on basic physical and chemical properties

Appearance	liquid
	colourless
Odor	Aliphatic
Odour threshold	No data available / Not applicable
рH	Not applicable
Initial boiling point	96 - 98 °C (204.8 - 208.4 °F)
Flash point	Not applicable to aerosols.
Decomposition temperature	No data available / Not applicable
Vapour pressure	46,7 mbar
Density	0,68 g/cm3
()	0,00 g/em5
Bulk density	No data available / Not applicable
Viscosity	No data available / Not applicable
Viscosity (kinematic)	No data available / Not applicable
Explosive properties	No data available / Not applicable
Solubility (qualitative)	Not miscible
(Solvent: Water)	Not misciple
Solidification temperature	No data available / Not applicable
Melting point	No data available / Not applicable
Flammability	No data available / Not applicable
-	
Auto-ignition temperature Explosive limits	No data available / Not applicable
Partition coefficient: n-octanol/water	No data available / Not applicable
	No data available / Not applicable
Evaporation rate	No data available / Not applicable
Vapor density	No data available / Not applicable
Oxidising properties	No data available / Not applicable

# 9.2. Other information

No data available / Not applicable

# **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

Strong oxidizing agents.

#### **10.2.** Chemical stability

Stable under recommended storage conditions.

# 10.3. Possibility of hazardous reactions

See section reactivity

# **10.4.** Conditions to avoid

No decomposition if used according to specifications.

#### **10.5. Incompatible materials**

See section reactivity

## 10.6. Hazardous decomposition products

None if used for intended purpose.

# **SECTION 11: Toxicological information**

## 11.1. Information on toxicological effects

## General toxicological information:

The mixture is classified based on the available hazard information for the ingredients as defined in the classification criteria for mixtures for each hazard class or differentiation in Annex I to Regulation 1272/2008/EC. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.

# Oral toxicity:

Small amounts of liquid aspirated into the respiratory system during ingestion or from vomiting may cause bronchopneumonia or pulmonary oedema.

#### Inhalative toxicity:

May cause headache and dizziness.

#### Skin irritation:

Causes skin irritation.

#### Eye irritation:

Prolonged or repeated contact may cause eye irritation.

## Acute oral toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Hydrocarbons, C7, n- alkanes, isoalkanes, cyclics 93924-37-9	LD50		oral		rat	OECD Guideline 401 (Acute Oral Toxicity)

# Acute inhalative toxicity:

Hazardous components	Value	Value	Route of	Exposure	Species	Method
CAS-No.	type		application	time		
Hydrocarbons, C7, n-	LC50	> 23,3 mg/l	Vapor.		rat	OECD Guideline 403 (Acute
alkanes, isoalkanes,						Inhalation Toxicity)
cyclics						
93924-37-9						

# Acute dermal toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Hydrocarbons, C7, n- alkanes, isoalkanes, cyclics 93924-37-9	LD50	> 2.920 mg/kg	dermal		rat	OECD Guideline 402 (Acute Dermal Toxicity)

#### Germ cell mutagenicity:

Hazardous components CAS-No.	Result	Type of study / Route of administration	Metabolic activation / Exposure time	Species	Method
Propane	negative with	in vitro mammalian	with and without		OECD Guideline 473 (In vitro
74-98-6	metabolic activation	chromosome aberration test			Mammalian Chromosome Aberration Test)

# **SECTION 12: Ecological information**

# General ecological information:

The mixture is classified based on the available hazard information for the ingredients as defined in the classification criteria for mixtures for each hazard class or differentiation in Annex I to Regulation 1272/2008/EC. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.

# 12.1. Toxicity

## **Ecotoxicity:**

Do not empty into drains / surface water / ground water. Toxic to aquatic life with long lasting effects.

Hazardous components CAS-No.	Value type	Value	Acute Toxicity Study	Exposure time	Species	Method
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics 93924-37-9	EC50	3 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics 93924-37-9	NOEC	0,17 mg/l	chronic Daphnia	21 d	Daphnia magna	OECD 211 (Daphnia magna, Reproduction Test)

## 12.2. Persistence and degradability

## Persistence and Biodegradability:

The product is not biodegradable.

Hazardous components	Result	Route of	Degradability	Method
CAS-No.		application		
Hydrocarbons, C7, n-alkanes,	readily biodegradable	aerobic	98 %	OECD Guideline 301 F (Ready
isoalkanes, cyclics				Biodegradability: Manometric
93924-37-9				Respirometry Test)

# 12.3. Bioaccumulative potential / 12.4. Mobility in soil

## Mobility:

The product is insoluble and sinks in water.

# **Bioaccumulative potential:**

No data available.

Hazardous components CAS-No.	LogKow	Bioconcentration factor (BCF)	Exposure time	Species	Temperature	Method
N,N-Dimethyl-p-toluidine 99-97-8	2,81				25 °C	

# 12.5. Results of PBT and vPvB assessment

Hazardous components CAS-No.	PBT/vPvB
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics 93924-37-9	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
Propane 74-98-6	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
N,N-Dimethyl-p-toluidine 99-97-8	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.

#### 12.6. Other adverse effects

No data available.

# SECTION 13: Disposal considerations

# 13.1. Waste treatment methods

Product disposal: Dispose of according to regulations.

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.

Waste code

14 06 03 Other solvents and solvent mixtures

# 14.1. UN number

ADR	1950
RID	1950
ADN	1950
IMDG	1950
IATA	1950

# 14.2. UN proper shipping name

ADR	AEROSOLS
RID	AEROSOLS
ADN	AEROSOLS
IMDG	AEROSOLS (n-Heptane)
IATA	Aerosols, flammable

# 14.3. Transport hazard class(es)

ADR	2.1
RID	2.1
ADN	2.1
IMDG	2.1
IATA	2.1

# 14.4. Packaging group

ADR RID ADN IMDG IATA

# 14.5. Environmental hazards

ADR	Environmentally Hazardous
RID	Environmentally Hazardous
ADN	Environmentally Hazardous
IMDG	Environmentally Hazardous
IATA	not applicable

#### 14.6. Special precautions for user

ADR	not applicable
	Tunnelcode: (D)
RID	not applicable
ADN	not applicable
IMDG	not applicable
IATA	not applicable

# 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

not applicable

# SECTION 15: Regulatory information

# 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

VOC content (1999/13/EC) 100 %

# 15.2. Chemical safety assessment

A chemical safety assessment has not been carried out.

# **SECTION 16: Other information**

The labelling of the product is indicated in Section 2. The full text

of all abbreviations indicated by codes in this safety data sheet are as follows:

H220 Extremely flammable gas.

H225 Highly flammable liquid and vapor.

H280 Contains gas under pressure; may explode if heated.

H301 Toxic if swallowed.

H304 May be fatal if swallowed and enters airways.

H311 Toxic in contact with skin.

H315 Causes skin irritation.

H331 Toxic if inhaled.

H336 May cause drowsiness or dizziness.

H373 May cause damage to organs through prolonged or repeated exposure.

H411 Toxic to aquatic life with long lasting effects.

H412 Harmful to aquatic life with long lasting 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.

#### Label elements (DPD):

F+ - Extremely flammable Xi - Irritant

N - Dangerous for the environment



Risk phrases:

R12 Extremely flammable.

- R38 Irritating to skin.
- R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R67 Vapours may cause drowsiness and dizziness.

Safety phrases:

S23 Do not breathe spray.

- S28 After contact with skin, wash immediately with plenty of water and soap.
- S61 Avoid release to the environment. Refer to special instructions/Safety data sheets.

#### Additional labeling:

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50 °C. Do not pierce or burn, even after use. Do not spray on a naked flame or any incandescent material. Keep away from sources of ignition - No smoking. Keep out of the reach of children

Relevant changes in this safety data sheet are indicated by vertical lines at the left margin in the body of this document. Corresponding text is displayed in a different color on shadowed fields.