

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

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# LOCTITE HY 4070 CR11G EN/DE

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

#### **1.1. Product identifier** LOCTITE HY 4070 CR11G EN/DE

### **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 Ltd Wood Lane End HP2 4RQ Hemel Hempstead

### Great Britain

Phone:	+44 1442 278000
Fax-no.:	+44 1442 278071

ua-productsafety.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 Methyl acrylate. 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 do. 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. Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.

# SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

General chemical description: Cyanoacrylate Adhesive

Hazardous components CAS-No.	EC Number REACH-Reg No.	content	Classification
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
Bis(2-hydroxy-3-tert-butyl-5- methylphenyl)methane 119-47-1	204-327-1 01-2119496065-33	0,3-< 3 %	Repr. 2 H361
Methyl acrylate 96-33-3	202-500-6 01-2119459302-44	0,1-< 0,25 %	Acute Tox. 4; Oral H302 Acute Tox. 4; Dermal H312 Flam. Liq. 2 H225 STOT SE 3 H335 Eye Irrit. 2 H319 Skin Irrit. 2 H315 Skin Sens. 1 H317 Acute Tox. 3; Inhalation H331 Aquatic Chronic 3 H412
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 (Acute Aquat Tox): 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.

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

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

In the event of a fire, carbon monoxide (CO) and carbon dioxide (CO2) can be released. In case of fire, keep containers cool with water spray.

### 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. Avoid contact with skin and eyes. Wear protective equipment.

#### **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 See advice in section 8 Avoid skin and eye contact.

Hygiene measures:

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

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

Ensure good ventilation/extraction. Store in a cool, dry place. Refer to Technical Data Sheet

**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
Methyl acrylate 96-33-3 [METHYL ACRYLATE]	5	18	Time Weighted Average (TWA):		EH40 WEL
Methyl acrylate 96-33-3 [METHYL ACRYLATE]	10	36	Short Term Exposure Limit (STEL):		EH40 WEL
Methyl acrylate 96-33-3 [METHYLACRYLATE]	5	18	Time Weighted Average (TWA):	Indicative	ECTLV
Methyl acrylate 96-33-3 [METHYLACRYLATE]	10	36	Short Term Exposure Limit (STEL):	Indicative	ECTLV
Hydroquinone 123-31-9 [HYDROQUINONE]		0,5	Time Weighted Average (TWA):		EH40 WEL

# **Occupational Exposure Limits**

Valid for

Ireland

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]	0,2		Time Weighted Average (TWA):		IR_OEL
Methyl acrylate 96-33-3 [METHYLACRYLATE]	5	18	Time Weighted Average (TWA):	Indicative	ECTLV
Methyl acrylate 96-33-3 [METHYLACRYLATE]	10	36	Short Term Exposure Limit (STEL):	Indicative	ECTLV
Methyl acrylate 96-33-3 [METHYL ACRYLATE]	5	18	Time Weighted Average (TWA):	Indicative OELV	IR_OEL
Methyl acrylate 96-33-3 [METHYL ACRYLATE]	10	36	Short Term Exposure Limit (STEL):	Indicative OELV	IR_OEL
Methyl acrylate 96-33-3 [METHYL ACRYLATE]			Skin designation:	Can be absorbed through the skin.	IR_OEL
Hydroquinone 123-31-9 [HYDROQUINONE]		0,5	Time Weighted Average (TWA):		IR_OEL

# Predicted No-Effect Concentration (PNEC):

Name on list	Environmental Compartment	Exposure period	Value				Remarks
			mg/l	ppm	mg/kg	others	
6,6'-di-tert-Butyl-2,2'-methylenedi-p-cresol	aqua		0,0068		00		
119-47-1	(freshwater)		mg/l				
6,6'-di-tert-Butyl-2,2'-methylenedi-p-cresol	aqua (marine		0,00068				
119-47-1	water)		mg/l				
6,6'-di-tert-Butyl-2,2'-methylenedi-p-cresol	aqua		0,048 mg/l				
119-47-1	(intermittent releases)						
6,6'-di-tert-Butyl-2,2'-methylenedi-p-cresol	sewage		100 mg/l				
119-47-1	treatment plant (STP)						
6,6'-di-tert-Butyl-2,2'-methylenedi-p-cresol	sediment				102 mg/kg		
119-47-1	(freshwater)						
6,6'-di-tert-Butyl-2,2'-methylenedi-p-cresol	sediment				10,2 mg/kg		
119-47-1	(marine water)						
6,6'-di-tert-Butyl-2,2'-methylenedi-p-cresol 119-47-1	soil				20,4 mg/kg		
6,6'-di-tert-Butyl-2,2'-methylenedi-p-cresol 119-47-1	oral				10 mg/kg		
Methyl acrylate 96-33-3	aqua (freshwater)					0,00272 mg/L	
Methyl acrylate	aqua (marine					0,00027 mg/L	
96-33-3	water)					-	
Methyl acrylate	aqua					0,011 mg/L	
96-33-3	(intermittent releases)						
Methyl acrylate	sewage					10 mg/L	
96-33-3	treatment plant (STP)						
Methyl acrylate	sediment				0,0115		
96-33-3	(freshwater)				mg/kg		
Methyl acrylate	sediment				0,0115		
96-33-3	(marine water)				mg/kg		
Methyl acrylate 96-33-3	soil				1 mg/kg		
Methyl acrylate	oral				0,0011		
96-33-3					mg/kg		
Hydroquinone 123-31-9	aqua (freshwater)		0,114 µg/l				
Hydroquinone 123-31-9	aqua (marine water)		0,0114 µg/l				
Hydroquinone 123-31-9	sediment (freshwater)				0,98 µg/kg		
Hydroquinone	sediment				0,097		
123-31-9	(marine water)				0,097 μg/kg		
Hydroquinone	aqua		0,00134	1	ro *6	1	
123-31-9	(intermittent releases)		mg/l				
Hydroquinone	soil		1	1	0,129	1	
123-31-9	5011				μg/kg		
Hydroquinone	sewage		0,71 mg/l		B	1	
123-31-9	treatment plant (STP)		, ,				

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	
6,6'-di-tert-Butyl-2,2'-methylenedi-p-cresol 119-47-1	Workers	dermal	Acute/short term exposure - systemic effects		3,175 mg/kg	
6,6'-di-tert-Butyl-2,2'-methylenedi-p-cresol 119-47-1	Workers	Inhalation	Acute/short term exposure - systemic effects		22,4 mg/m3	
6,6'-di-tert-Butyl-2,2'-methylenedi-p-cresol 119-47-1	Workers	dermal	Long term exposure - systemic effects		0,635 mg/kg	
6,6'-di-tert-Butyl-2,2'-methylenedi-p-cresol 119-47-1	Workers	Inhalation	Long term exposure - systemic effects		4,48 mg/m3	
6,6'-di-tert-Butyl-2,2'-methylenedi-p-cresol 119-47-1	General population	dermal	Acute/short term exposure - systemic effects		1,59 mg/kg	
6,6'-di-tert-Butyl-2,2'-methylenedi-p-cresol 119-47-1	General population	Inhalation	Acute/short term exposure - systemic effects		5,5 mg/m3	
6,6'-di-tert-Butyl-2,2'-methylenedi-p-cresol 119-47-1	General population	oral	Acute/short term exposure - systemic effects		1,59 mg/kg	
6,6'-di-tert-Butyl-2,2'-methylenedi-p-cresol 119-47-1	General population	dermal	Long term exposure - systemic effects		0,318 mg/kg	
6,6'-di-tert-Butyl-2,2'-methylenedi-p-cresol 119-47-1	General population	Inhalation	Long term exposure - systemic effects		1,1 mg/m3	
6,6'-di-tert-Butyl-2,2'-methylenedi-p-cresol 119-47-1	General population	oral	Long term exposure - systemic effects		0,318 mg/kg	
Methyl acrylate 96-33-3	Workers	inhalation	Long term exposure - local effects		18 mg/m3	
Methyl acrylate 96-33-3	Workers	dermal	Acute/short term exposure - local effects		0,49 mg/cm2	
Methyl acrylate 96-33-3	General population	inhalation	Acute/short term exposure - local effects		2,1 mg/m3	
Hydroquinone 123-31-9	Workers	dermal	Long term exposure - systemic effects		128 mg/kg	
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	
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:

Engineering controls: Ensure good ventilation/extraction.

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 (EN 14387)

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. Protective eye equipment should conform to EN166.

Skin protection: Wear suitable protective clothing. Protective clothing should conform to EN 14605 for liquid splashes or to EN 13982 for dusts.

Advices to personal protection equipment:

The information provided on personal protective equipment is for guidance purposes only. A full risk assessment should be conducted prior to using this product to determine the appropriate personal protective equipment to suit local conditions. Personal protective equipment should conform to the relevant EN standard.

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

#### 9.1. Information on basic physical and chemical properties

Appearance Odor Odour threshold	gel gel Clear, colourless irritating No data available / Not applicable
pH	No data available / Not applicable
Initial boiling point	149 °C (300.2 °F)
Flash point	80 - 93 °C (176 - 199.4 °F)
Decomposition temperature	No data available / Not applicable
Vapour pressure	No data available / Not applicable
Density	No data available / Not applicable
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)	No data available / Not applicable
Solidification temperature	No data available / Not applicable
Melting point	No data available / Not applicable
Flammability	No data available / Not applicable
Auto-ignition temperature	No data available / Not applicable
Explosive limits	No data available / Not applicable
Partition coefficient: n-octanol/water	No data available / Not applicable
Evaporation rate	No data available / Not applicable

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Vapor density Oxidising properties

#### 9.2. Other information

No data available / Not applicable

# **SECTION 10: Stability and reactivity**

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

#### 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

carbon oxides.

### **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 (EC) No 1272/2008. 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.

#### Inhalative toxicity:

May cause respiratory irritation. 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:

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

#### Sensitizing:

May cause allergic reaction.

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Ethyl 2-cyanoacrylate	LD50	> 5.000 mg/kg	oral	tinc	rat	OECD Guideline 401 (Acute
7085-85-0	LD30	> 5.000 mg/kg	orai		Iut	Oral Toxicity)
Bis(2-hydroxy-3-tert-	LD50	> 10.000 mg/kg	oral		rat	not specified
butyl-5-						F
methylphenyl)methane						
119-47-1						
Methyl acrylate	LD50	768 mg/kg	oral		rat	OECD Guideline 401 (Acute
96-33-3						Oral Toxicity)
Hydroquinone	LD50	367 mg/kg	oral		rat	OECD Guideline 401 (Acute
123-31-9						Oral Toxicity)

# Acute inhalative toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Methyl acrylate 96-33-3	LC50	6,5 mg/l	Vapor.	4 h	rat	OECD Guideline 403 (Acute Inhalation 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)
Bis(2-hydroxy-3-tert- butyl-5-	LD50	> 10.000 mg/kg	dermal		rat	not specified
methylphenyl)methane 119-47-1						
Methyl acrylate 96-33-3	LD50	1.250 mg/kg	dermal		rabbit	Draize Test

# Skin corrosion/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
Ethyl 2-cyanoacrylate	slightly irritating	24 h	rabbit	OECD Guideline 404 (Acute
7085-85-0				Dermal Irritation / Corrosion)
Methyl acrylate	irritating	4 h	rabbit	OECD Guideline 404 (Acute
96-33-3				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)

# Respiratory or skin sensitization:

Hazardous components CAS-No.	Result	Test type	Species	Method
Ethyl 2-cyanoacrylate 7085-85-0	not sensitising		guinea pig	not specified
Methyl acrylate 96-33-3	sensitising	Mouse local lymphnod e assay (LLNA)	mouse	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
Hydroquinone 123-31-9	sensitising	Guinea pig maximisat ion test	guinea pig	not specified

# 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)
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)
Methyl acrylate 96-33-3	negative	inhalation: vapour		mouse	not specified
Hydroquinone 123-31-9	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		EU Method B.13/14 (Mutagenicity)

### **Carcinogenicity:**

Hazardous components CAS-No.	Result	Species	Sex	Exposure timeFrequenc y of treatment	Route of application	Method
Methyl acrylate 96-33-3	not carcinogenic	rat		24 m 6 h/d, 5 d/w		OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)

# **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
Methyl acrylate 96-33-3	NOAEL=23 ppm	inhalation	13 weeks6 hrs/day, 5 days/wk	rat	BASF Test
Methyl acrylate 96-33-3	LOAEL=20 mg/kg	oral: drinking water	13 wcontinuous	rat	OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)
Methyl acrylate 96-33-3	NOAEL=5 mg/kg	oral: drinking water	13 wcontinuous	rat	OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)
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 (EC) No 1272/2008. 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
Bis(2-hydroxy-3-tert-butyl-5- methylphenyl)methane 119-47-1	EC 50	> 10.000 mg/l	Bacteria	3 h		OECD Guideline 209 (Activated Sludge, Respiration
Methyl acrylate 96-33-3	LC50	3,4 mg/l	Fish	96 h	Oncorhynchus mykiss	Inhibition Test) OECD Guideline 203 (Fish, Acute Toxicity Test)
Methyl acrylate 96-33-3	EC50	2,6 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Methyl acrylate 96-33-3	EC50	3,55 mg/l	Algae	72 h	Selenastrum capricornutum (new name: Pseudokirchnerella subcapitata)	OECD Guideline
Methyl acrylate 96-33-3	EC10	> 100 mg/l	Bacteria	72 h		not specified
Methyl acrylate 96-33-3	NOEC	0,19 mg/l	chronic Daphnia	21 d	Daphnia magna	EPA OTS 797.1330 (Daphnid Chronic Toxicity 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
Hydroquinone 123-31-9	EC 50	0,038 mg/l	Bacteria	30 min	· · ·	not specified
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:** The product is not biodegradable.

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)
Bis(2-hydroxy-3-tert-butyl-5- methylphenyl)methane 119-47-1	under test conditions no biodegradation observed	aerobic	0 %	OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I))
Methyl acrylate 96-33-3	readily biodegradable	aerobic	90 - 100 %	OECD Guideline 310 (Ready BiodegradabilityCO2 in Sealed Vessels (Headspace 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.

## **Bioaccumulative potential:**

MSDS-No.: 572854

V001.0

No data available for the product.

Hazardous components CAS-No.	LogPow	Bioconcentration factor (BCF)	Exposure time	Species	Temperature	Method
Ethyl 2-cyanoacrylate 7085-85-0	0,776				22 °C	EU Method A.8 (Partition Coefficient)
Bis(2-hydroxy-3-tert-butyl-5- methylphenyl)methane 119-47-1 Bis(2-hydroxy-3-tert-butyl-5- methylphenyl)methane 119-47-1	6,25	320 - 780	60 d	Cyprinus carpio	20 °C	OECD Guideline 305 E (Bioaccumulation: Flow- through Fish Test) OECD Guideline 107 (Partition Coefficient (n- octanol / water), Shake Flask Method)
Methyl acrylate 96-33-3 Methyl acrylate 96-33-3	0,739	3,16			25 °C	not specified OECD Guideline 107 (Partition Coefficient (n- octanol / water), Shake Flask Method)
Hydroquinone 123-31-9	0,59					EU Method A.8 (Partition Coefficient)

### 12.5. Results of PBT and vPvB assessment

Hazardous components CAS-No.	PBT/vPvB
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.
Methyl acrylate 96-33-3	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
Hydroquinone 123-31-9	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:

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.

## 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 The valid EWC waste code numbers are source-related. The manufacturer is therefore unable to specify EWC waste codes for the articles or products used in the various sectors. The EWC codes listed are intended as a recommendation for users. We will be happy to advise you.

# **SECTION 14: Transport information**

14.1.	UN number	
	ADR	Not dangerous goods
	RID	Not dangerous goods
	ADN	Not dangerous goods
	IMDG	Not dangerous goods
	IATA	3334
14.2.	UN proper shi	ipping 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.	Transport haz	zard class(es)
	ADR	Not dangerous goods
	RID	Not dangerous goods
	ADN	Not dangerous goods
	IMDG	Not dangerous goods
	IATA	9
14.4.	Packing group	)
	ADR	Not dangerous goods
	RID	Not dangerous goods
	ADN	Not dangerous goods
	IMDG	Not dangerous goods
	IATA	III
14.5.	Environmenta	al hazards
	ADR	not applicable
	RID	not applicable not applicable
	ADN	not applicable
	IMDG	not applicable
	IATA	not applicable
14.6.	Special precau	itions for user
	ADR	not applicable
	RID	not applicable
	ADN	not applicable
	IMDG	not applicable
	IATA	Not more than 500 ml (each inner package) - Unrestricted
14.7.	Transport in l	oulk according to Annex II of Marpol 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 (2010/75/EC) < 3 %

# 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:

H225 Highly flammable liquid and vapor.

H302 Harmful if swallowed.

H312 Harmful in contact with skin.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H331 Toxic 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.

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.

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 Regulation (EC) No 1907/2006

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# LOCTITE HY 4070 CR11G EN/DE

SDS No. : 562801 V001.0 Revision: 11.04.2017 printing date: 16.05.2017 Replaces version from: 02.06.2016

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

# 1.1. Product identifier

LOCTITE HY 4070 CR11G EN/DE

# **Contains:**

Hexanediol dimethacrylate

**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 Ltd Wood Lane End HP2 4RQ Hemel Hempstead

Great Britain

Phone:	+44 1442 278000
Fax-no.:	+44 1442 278071

ua-productsafety.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:	<ul><li>H315 Causes skin irritation.</li><li>H319 Causes serious eye irritation.</li><li>H335 May cause respiratory irritation.</li></ul>
Supplemental information	Contains 3,4,5,6-tetrahydrophthalic anhydride. May produce an allergic reaction.
Precautionary statement:	***For consumer use only: P101 If medical advice is needed, have product container or label at hand. P102 Keep out of reach of children. P501 Dispose of waste and residues in accordance with local authority requirements***
Precautionary statement: Prevention	P261 Avoid breathing vapours.
Precautionary statement: Response	P302+P352 IF ON SKIN: Wash with plenty of soap and water. P337+P313 If eye irritation persists: Get medical advice/attention.

# 2.3. Other hazards

None if used properly. Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.

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

### 3.2. Mixtures

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

Hazardous components CAS-No.	EC Number REACH-Reg No.	content	Classification
Hexanediol dimethacrylate 6606-59-3	229-551-7	50- 100 %	STOT SE 3 H335 Skin Irrit. 2 H315 Eye Irrit. 2 H319
3,4,5,6-tetrahydrophthalic anhydride 2426-02-0	219-374-3	0,25-< 1 %	Eye Dam. 1 H318 Resp. Sens. 1 H334 Aquatic Chronic 3 H412 Skin Sens. 1 H317

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. Seek medical advice. Eye contact:

Rinse immediately with plenty of running water (for 10 minutes). Seek medical attention if necessary.

Ingestion:

Rinse out mouth, drink 1-2 glasses of water, do not induce vomiting. Seek medical advice.

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

SKIN: Redness, inflammation.

EYE: Irritation, conjunctivitis.

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:** Carbon dioxide, foam, powder

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

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

In the event of a fire, carbon monoxide (CO), carbon dioxide (CO2) and nitrogen oxides (NOx) 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 contact with skin and eyes. Ensure adequate ventilation. Wear protective equipment.

#### 6.2. Environmental precautions

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

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

For small spills wipe up with paper towel and place in container for disposal. For large spills absorb onto inert absorbent material and place in sealed container for disposal.

### 6.4. Reference to other sections

See advice in section 8

# **SECTION 7: Handling and storage**

# 7.1. Precautions for safe handling

Use only in well-ventilated areas. Avoid skin and eye contact. Prolonged or repeated skin contact should be avoided to minimise any risk of sensitisation. See advice in section 8

### 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 Refer to Technical Data Sheet

7.3. Specific end use(s) Adhesive

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

### 8.1. Control parameters

#### **Occupational Exposure Limits**

Valid for

Great Britain

None

### **Occupational Exposure Limits**

Valid for Ireland

None

**Biological Exposure Indices:** None

#### 8.2. Exposure controls:

Engineering controls: Ensure good ventilation/extraction.

Respiratory protection: Use only in well-ventilated areas. 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 (EN 14387)

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:

Safety glasses with sideshields or chemical safety goggles should be worn if there is a risk of splashing. Protective eye equipment should conform to EN166.

Skin protection: Wear suitable protective clothing.

Protective clothing should conform to EN 14605 for liquid splashes or to EN 13982 for dusts.

Advices to personal protection equipment:

The information provided on personal protective equipment is for guidance purposes only. A full risk assessment should be conducted prior to using this product to determine the appropriate personal protective equipment to suit local conditions. Personal protective equipment should conform to the relevant EN standard.

# SECTION 9: Physical and chemical properties

# 9.1. Information on basic physical and chemical properties

Appearance	liquid
	liquid
	colourless to
	yellowish
Odor	characteristic
Odour threshold	No data available / Not applicable
рН	No data available / Not applicable
Initial boiling point	No data available / Not applicable
Flash point	110 °C (230 °F); no method
Decomposition temperature	No data available / Not applicable
Vapour pressure	No data available / Not applicable
Density	No data available / Not applicable
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)	No data available / Not applicable
Solidification temperature	No data available / Not applicable
Melting point	No data available / Not applicable
Flammability	No data available / Not applicable
Auto-ignition temperature	No data available / Not applicable
Explosive limits	No data available / Not applicable
	NUL 4 11 1 / NU 4 11 11

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

No data available / Not applicable

### 9.2. Other information

No data available / Not applicable

Partition coefficient: n-octanol/water

# **SECTION 10: Stability and reactivity**

### 10.1. Reactivity

Evaporation rate Vapor density

Oxidising properties

Reaction with strong acids. Reacts with strong oxidants.

### 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** carbon oxides.

carbon oxides.

MSDS-No.: 562801

V001.0

# **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 (EC) No 1272/2008. 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:

May cause irritation to the digestive tract.

## Skin irritation:

Causes skin irritation.

# Eye irritation:

Causes serious eye irritation.

#### Sensitizing:

May cause allergic reaction.

#### Acute oral toxicity:

Hazardous components	Value	Value	Route of	Exposure	Species	Method
CAS-No.	type		application	time	1.1	

### Acute inhalative toxicity:

Hazardous components	Value	Value	Route of	Exposure	Species	Method
CAS-NO.	type		application	time		

Acute dermal toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method	
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# **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 (EC) No 1272/2008. 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.

# 12.2. Persistence and degradability

**Persistence and Biodegradability:** The product is not biodegradable.

### 12.3. Bioaccumulative potential / 12.4. Mobility in soil

### Mobility:

Cured adhesives are immobile.

#### **Bioaccumulative potential:** No data available.

### 12.5. Results of PBT and vPvB assessment

No data available.

### 12.6. Other adverse effects

No data available.

# **SECTION 13: Disposal considerations**

#### **13.1.** Waste treatment methods

Product disposal:

Dispose of in accordance with local and national regulations. Collection and delivery to recycling enterprise or other registered elimination institution.

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

The valid EWC waste code numbers are source-related. The manufacturer is therefore unable to specify EWC waste codes for the articles or products used in the various sectors. The EWC codes listed are intended as a recommendation for users. We will be happy to advise you.

# **SECTION 14: Transport information**

14.1.	UN number
	Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.
14.2.	UN proper shipping name
	Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.
14.3.	Transport hazard class(es)
	Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.
14.4.	Packing group
	Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.
14.5.	Environmental hazards
	Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.
14.6.	Special precautions for user
	Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.
14.7.	Transport in bulk according to Annex II of Marpol 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 (2010/75/EC) < 3,00 %

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:

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.

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.

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.