

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

Page 1 of 18

LOCTITE HY 4070

SDS No.: 572854 V003.0 Revision: 18.10.2019 printing date: 13.08.2020 Replaces version from: 30.04.2019

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

- **1.1. Product identifier** LOCTITE HY 4070
- **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:



Contains

Ethyl 2-cyanoacrylate

Signal word:	Warning
Hazard statement:	H315 Causes skin irritation. H319 Causes serious eye irritation. H335 May cause respiratory irritation.
Supplemental information	Contains: Methyl acrylate May produce an allergic reaction. Cyanoacrylate. Danger. Bonds skin and eyes in seconds. Keep out of the reach of children.
Precautionary statement: Prevention	P261 Avoid breathing vapors. 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	0,1-< 1 %	Repr. 2 H361
Methyl acrylate 96-33-3	202-500-6	0,1-< 1 %	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.

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 ³	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 ³	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]			Skin designation:	Can be absorbed through the skin.	IR_OEL
Methyl acrylate 96-33-3 [METHYL ACRYLATE]	10	36	Short Term Exposure Limit (STEL):	15 minutes Indicative OELV	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				
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 119-47-1	aqua (intermittent releases)		0,048 mg/l				
6,6'-di-tert-Butyl-2,2'-methylenedi-p-cresol 119-47-1	sewage treatment plant (STP)		100 mg/l				
6,6'-di-tert-Butyl-2,2'-methylenedi-p-cresol 119-47-1	sediment (freshwater)				102 mg/kg		
6,6'-di-tert-Butyl-2,2'-methylenedi-p-cresol 119-47-1	sediment (marine water)				10,2 mg/kg		
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)		0,003 mg/l				
Methyl acrylate 96-33-3	aqua (marine water)		0 mg/l				
Methyl acrylate 96-33-3	aqua (intermittent releases)		0,011 mg/l				
Methyl acrylate 96-33-3	sewage treatment plant (STP)		10 mg/l				
Methyl acrylate	sediment				0,011		
96-33-3	(freshwater)				mg/kg		
Methyl acrylate	sediment				0,011		
96-33-3	(marine water)				mg/kg		
Methyl acrylate 96-33-3	Soil				1 mg/kg		
96-53-5 Methyl acrylate 96-33-3	oral				0,001 mg/kg		
Hydroquinone	aqua		0,00057		iiig/kg		
123-31-9	(freshwater)		mg/l				
Hydroquinone 123-31-9	aqua (marine water)		0,000057 mg/l				
Hydroquinone 123-31-9	sediment (freshwater)				0,0049 mg/kg		
Hydroquinone 123-31-9	sediment (marine water)				0,00049 mg/kg		
Hydroquinone 123-31-9	aqua (intermittent releases)		0,00134 mg/l				
Hydroquinone 123-31-9	Soil				0,00064 mg/kg		
Hydroquinone 123-31-9	sewage treatment plant (STP)		0,71 mg/l				

Derived No-Effect Level (DNEL):

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
Ethyl 2-cyanoacrylate	Workers	Inhalation	Long term		9,25 mg/m3	
7085-85-0			exposure - local effects			
Ethyl 2-cyanoacrylate	Workers	Inhalation	Long term		9,25 mg/m3	
7085-85-0			exposure - systemic effects			
Ethyl 2-cyanoacrylate	General	Inhalation	Long term		9,25 mg/m3	
7085-85-0	population		exposure - local effects			
Ethyl 2-cyanoacrylate	General	Inhalation	Long term		9,25 mg/m3	
7085-85-0	population		exposure - systemic effects			
6,6'-di-tert-Butyl-2,2'-methylenedi-p-cresol	Workers	dermal	Acute/short term		3,175 mg/kg	
119-47-1			exposure - systemic effects			
6,6'-di-tert-Butyl-2,2'-methylenedi-p-cresol	Workers	inhalation	Acute/short term		22,4 mg/m3	
119-47-1			exposure - systemic effects		0	
6,6'-di-tert-Butyl-2,2'-methylenedi-p-cresol	Workers	dermal	Long term		0,635 mg/kg	
119-47-1			exposure - systemic effects			
6,6'-di-tert-Butyl-2,2'-methylenedi-p-cresol	Workers	inhalation	Long term		4,48 mg/m3	
119-47-1			exposure -			
C Cl. di tart Destal 2 21 mathedana di managal	Comound1	4	systemic effects		1.50	
6,6'-di-tert-Butyl-2,2'-methylenedi-p-cresol 119-47-1	General	dermal	Acute/short term exposure -		1,59 mg/kg	
119-47-1	population		systemic effects			
6,6'-di-tert-Butyl-2,2'-methylenedi-p-cresol	General	inhalation	Acute/short term		5,5 mg/m3	
119-47-1	population	minutation	exposure -		5,5 mg/m5	
	population		systemic effects			
6,6'-di-tert-Butyl-2,2'-methylenedi-p-cresol	General	oral	Acute/short term		1,59 mg/kg	
119-47-1	population		exposure -			
			systemic effects			
6,6'-di-tert-Butyl-2,2'-methylenedi-p-cresol	General	dermal	Long term		0,318 mg/kg	
119-47-1	population		exposure - systemic effects			
6,6'-di-tert-Butyl-2,2'-methylenedi-p-cresol	General	inhalation	Long term		1,1 mg/m3	
119-47-1	population	minaration	exposure -		1,1 mg/m3	
117 17 1	population		systemic effects			
6,6'-di-tert-Butyl-2,2'-methylenedi-p-cresol	General	oral	Long term		0,318 mg/kg	
119-47-1	population		exposure -			
			systemic effects			
Methyl acrylate	Workers	inhalation	Long term		18 mg/m3	
96-33-3			exposure - local effects			
Methyl acrylate	Workers	dermal	Acute/short term		0,49 mg/cm2	
96-33-3	WORKERS	uermai	exposure - local		0,49 mg/cm2	
			effects			
Methyl acrylate	General	inhalation	Acute/short term		2,1 mg/m3	
96-33-3	population		exposure - local		-	
			effects			
Hydroquinone	Workers	dermal	Long term		3,33 mg/kg	
123-31-9			exposure -		1	
Hydroquinone	Workers	inhalation	systemic effects Long term	+	2.1 mg/m^2	
123-31-9	WUIKEIS	minalation	exposure -		2,1 mg/m3	
			systemic effects		1	
Hydroquinone	General	dermal	Long term		1,66 mg/kg	
123-31-9	population		exposure -			
			systemic effects			
Hydroquinone	General	inhalation	Long term		1,05 mg/m3	
123-31-9	population		exposure -			
YY 1 '		1	systemic effects			
Hydroquinone	General	oral	Long term		0,6 mg/kg	
123-31-9	population		exposure - systemic effects		1	
			systemic effects	1	1	

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

Page 10 of 18

Viscosity (kinematic) Explosive properties 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

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

General toxicological information:

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.

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

11.1. Information on toxicological effects

Acute oral toxicity:

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

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

Acute dermal toxicity:

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances	Value	Value	Species	Method
CAS-No.	type			
Ethyl 2-cyanoacrylate 7085-85-0	LD50	> 2.000 mg/kg	rabbit	OECD Guideline 402 (Acute Dermal Toxicity)
Bis(2-hydroxy-3-tert- butyl-5- methylphenyl)methane 119-47-1	LD50	> 10.000 mg/kg	rat	not specified
Methyl acrylate 96-33-3	LD50	1.250 mg/kg	rabbit	Draize Test
Hydroquinone 123-31-9	LD50	> 2.000 mg/kg	rabbit	OECD Guideline 402 (Acute Dermal Toxicity)

Acute inhalative toxicity:

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Value type	Value	Test atmosphere	Exposure time	Species	Method
Methyl acrylate 96-33-3	LC50	6,5 mg/l	vapour	4 h	rat	equivalent or similar to OECD Guideline 403 (Acute Inhalation Toxicity)

Skin corrosion/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

Hazardous substances 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)
Methyl acrylate 96-33-3	irritating	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
Hydroquinone 123-31-9	not irritating	24 h	rabbit	Weight of evidence

Serious eye damage/irritation:

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

Hazardous substances 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:

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

Hazardous substances	Result	Test type	Species	Method
CAS-No.				
Ethyl 2-cyanoacrylate 7085-85-0	not sensitising		guinea pig	not specified
Methyl acrylate 96-33-3	sensitising	Mouse local lymphnode assay (LLNA)	mouse	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
Hydroquinone 123-31-9	sensitising	Guinea pig maximisation test	guinea pig	equivalent or similar to OECD Guideline 406 (Skin Sensitisation)
Hydroquinone 123-31-9	sensitising	Mouse local lymphnode assay (LLNA)	mouse	equivalent or similar to OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)

Germ cell mutagenicity:

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

Hazardous substances 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)
Ethyl 2-cyanoacrylate 7085-85-0	negative	mammalian cell gene mutation assay	with and without		OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)
Ethyl 2-cyanoacrylate 7085-85-0	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)
Hydroquinone 123-31-9	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		equivalent or similar to OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Hydroquinone 123-31-9	negative	in vitro mammalian chromosome aberration test	with and without		OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)
Hydroquinone 123-31-9	positive	mammalian cell gene mutation assay	with and without		OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)
Methyl acrylate 96-33-3	negative	inhalation: vapour		mouse	not specified
Hydroquinone 123-31-9	positive	intraperitoneal		mouse	equivalent or similar to OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)
Hydroquinone 123-31-9	negative	oral: gavage		rat	equivalent or similar to OECD Guideline 478 (Genetic Toxicology: Rodent Dominant Lethal Test)
Hydroquinone 123-31-9	positive	intraperitoneal		mouse	equivalent or similar to OECD Guideline 483 (Mammalian Spermatogonial Chromosome Aberration Test)

Carcinogenicity

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

Hazardous components CAS-No.	Result	Route of application	Exposure time / Frequency of treatment	Species	Sex	Method
Methyl acrylate 96-33-3	not carcinogenic	inhalation: vapour	24 m 6 h/d, 5 d/w	rat	male/female	OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)
Hydroquinone 123-31-9	carcinogenic	oral: gavage	103 w 5 d/w	rat	male/female	equivalent or similar OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)
Hydroquinone 123-31-9	carcinogenic	oral: gavage	103 w 5 d/w	mouse	female	equivalent or similar OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)

Reproductive toxicity:

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Result / Value	Test type	Route of application	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)
Hydroquinone 123-31-9	NOAEL P 15 mg/kg NOAEL F1 150 mg/kg NOAEL F2 150 mg/kg	Two generation study	oral: gavage	rat	EPA OTS 798.4700 (Reproduction and Fertility Effects)

STOT-single exposure:

No data available.

STOT-repeated exposure::

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Result / Value	Route of application	Exposure time / Frequency of treatment	Species	Method
Methyl acrylate 96-33-3	NOAEL 23 ppm	inhalation	13 weeks 6 hrs/day, 5 days/wk	rat	BASF Test
Methyl acrylate 96-33-3	NOAEL 5 mg/kg	oral: drinking water	13 w continuous	rat	OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)
Hydroquinone 123-31-9	NOAEL 50 mg/kg	oral: gavage	13 w 5 d/w	rat	not specified
Hydroquinone 123-31-9	NOAEL 73,9 mg/kg	dermal	13 w 6 h/d, 5 d/w	rat	equivalent or similar to OECD Guideline 411 (Subchronic Dermal Toxicity: 90-Day Study)

Aspiration hazard:

No data available.

Page 14 of 18

SECTION 12: Ecological information

General ecological information:

Do not empty into drains / surface water / ground water. Biological and Chemical Oxygen Demands (BOD and COD) are insignificant.

12.1. Toxicity

Toxicity (Fish):

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
Bis(2-hydroxy-3-tert-butyl-5-	LC50			Oryzias latipes	OECD Guideline 203 (Fish,
methylphenyl)methane					Acute Toxicity Test)
119-47-1					
Methyl acrylate	LC50	3,4 mg/l	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish,
96-33-3					Acute Toxicity Test)
Hydroquinone	LC50	0,638 mg/l	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish,
123-31-9					Acute Toxicity Test)

Toxicity (Daphnia):

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
Bis(2-hydroxy-3-tert-butyl-5-	EC50		48 h	Daphnia magna	OECD Guideline 202
methylphenyl)methane					(Daphnia sp. Acute
119-47-1					Immobilisation Test)
Methyl acrylate	EC50	2,6 mg/l	48 h	Daphnia magna	OECD Guideline 202
96-33-3					(Daphnia sp. Acute
					Immobilisation Test)
Hydroquinone	EC50	0,134 mg/l	48 h	Daphnia magna	OECD Guideline 202
123-31-9					(Daphnia sp. Acute
					Immobilisation Test)

Chronic toxicity to aquatic invertebrates

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
Bis(2-hydroxy-3-tert-butyl-5- methylphenyl)methane 119-47-1	NOEC			Daphnia magna	OECD 211 (Daphnia magna, Reproduction Test)
Methyl acrylate 96-33-3	NOEC	0,19 mg/l	21 d	Daphnia magna	EPA OTS 797.1330 (Daphnid Chronic Toxicity Test)
Hydroquinone 123-31-9	NOEC	0,0057 mg/l	21 d	Daphnia magna	OECD 211 (Daphnia magna, Reproduction Test)

Toxicity (Algae):

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
Bis(2-hydroxy-3-tert-butyl-5- methylphenyl)methane 119-47-1	EC50		72 h	(reported as Selenastrum capricornutum)	Growth Inhibition Test)
Bis(2-hydroxy-3-tert-butyl-5- methylphenyl)methane 119-47-1	NOEC		72 h	Pseudokirchneriella subcapitata (reported as Selenastrum capricornutum)	OECD Guideline 201 (Alga, Growth Inhibition Test)
Methyl acrylate 96-33-3	EC50	3,55 mg/l	72 h	Selenastrum capricornutum (new name: Pseudokirchneriella subcapitata)	OECD Guideline 201 (Alga, Growth Inhibition Test)
Hydroquinone 123-31-9	EC50	0,335 mg/l	72 h	Selenastrum capricornutum (new name: Pseudokirchneriella subcapitata)	OECD Guideline 201 (Alga, Growth Inhibition Test)

Toxicity to microorganisms

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Value	Value	Exposure time	Species	Method
Bis(2-hydroxy-3-tert-butyl-5- methylphenyl)methane 119-47-1	type EC 50	> 10.000 mg/l	3 h		OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test)
Methyl acrylate 96-33-3	EC10	> 100 mg/l	72 h		not specified
Hydroquinone 123-31-9	EC 50	0,038 mg/l	30 min		not specified

12.2. Persistence and degradability

The product is not biodegradable.

Hazardous substances CAS-No.	Result	Test type	Degradability	Exposure time	Method
Ethyl 2-cyanoacrylate 7085-85-0	not readily biodegradable.	aerobic	57 %	28 d	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 %	28 d	OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I))
Methyl acrylate 96-33-3	readily biodegradable	aerobic	90 - 100 %	28 d	OECD Guideline 310 (Ready BiodegradabilityCO2 in Sealed Vessels (Headspace Test)
Hydroquinone 123-31-9	readily biodegradable	aerobic	75 - 81 %	30 d	EU Method C.4-E (Determination of the "Ready" BiodegradabilityClosed Bottle Test)

12.3. Bioaccumulative potential

Hazardous substances	Bioconcentratio	Exposure time	Temperature	Species	Method
CAS-No.	n factor (BCF)				
Bis(2-hydroxy-3-tert-butyl-5-	320 - 780	60 d		Cyprinus carpio	OECD Guideline 305 E
methylphenyl)methane					(Bioaccumulation: Flow-through
119-47-1					Fish Test)
Methyl acrylate	3,16				not specified
96-33-3					_

12.4. Mobility in soil

Cured adhesives are immobile.

Hazardous substances CAS-No.	LogPow	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	6,25	20 °C	OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method)
Methyl acrylate 96-33-3	0,739	25 °C	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 substances	PBT / vPvB
CAS-No.	
Ethyl 2-cyanoacrylate	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
7085-85-0	Bioaccumulative (vPvB) criteria.
Bis(2-hydroxy-3-tert-butyl-5-	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
methylphenyl)methane	Bioaccumulative (vPvB) criteria.
119-47-1	
Methyl acrylate	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
96-33-3	Bioaccumulative (vPvB) criteria.
Hydroquinone	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
123-31-9	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
	IAIA	+66
14.2.	UN proper ship	pping 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 haza	ard class(es)
	ADR	Not dengerous goods
	RID	Not dangerous goods
		Not dangerous goods
	ADN	Not dangerous goods
	IMDG IATA	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.	Environmental	hazards
	ADR	not applicable
	RID	not applicable
	ADN	not applicable
	IMDG	not applicable
	IATA	not applicable
14.6.	Special precaut	tions 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 b	ulk 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 genere.

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 Safety Data Sheet has been produced for sales from Henkel to parties purchasing from Henkel, is based on Regulation (EC) No 1907/2006 and provides information in accordance with applicable regulations of the European Union only. In that respect, no statement, warranty or representation of any kind is given as to compliance with any statutory laws or regulations of any other jurisdiction or territory other than the European Union. When exporting to territories other than the European Union, please consult with the respective Safety Data Sheet of the concerned territory to ensure compliance or liaise with Henkel's Product Safety and Regulatory Affairs Department (ua-productsafety.de@henkel.com) prior to export to other territories than the European Union.

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.

Dear Customer,

Henkel is committed to creating a sustainable future by promoting opportunities along the entire value chain. If you would like to contribute by switching from a paper to the electronic version of SDS, please contact the local Customer Service representative. We recommend to use a non-personal email address (e.g. SDS@your_company.com).

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

Page 1 of 14

LOCTITE HY 4070

SDS No. : 562801 V003.0 Revision: 18.10.2019 printing date: 13.08.2020 Replaces version from: 29.04.2019

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

- **1.1. Product identifier** LOCTITE HY 4070
- **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	
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:



Hexanediol dimethacrylate

Signal word:	Warning
Hazard statement:	H315 Causes skin irritation.H319 Causes serious eye irritation.H335 May cause respiratory irritation.H411 Toxic to aquatic life with long lasting effects.
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 vapors. P273 Avoid release to the environment.
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	229-551-7	50- 100 %	STOT SE 3
6606-59-3	01-2120760621-59	50 100 /0	H335
			Aquatic Chronic 2
			H411
			Skin Irrit. 2
			H315
			Eye Irrit. 2
			H319
3,4,5,6-tetrahydrophthalic anhydride	219-374-3	0,1-< 1 %	Eye Dam. 1
2426-02-0			H318
			Resp. Sens. 1
			H334
			Aquatic Chronic 3
			H412
			Skin Sens. 1
			H317
Hydroquinone	204-617-8	0,01 - < 0,1 %	Aquatic Acute 1
123-31-9	01-2119524016-51		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

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. Dispose of contaminated material as waste according to Section 13.

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

Ingredient [Regulated substance]	ppm	mg/m ³	Value type	Short term exposure limit category / Remarks	Regulatory list
Hydroquinone		0,5	Time Weighted Average		EH40 WEL
123-31-9			(TWA):		
[HYDROQUINONE]					

Occupational Exposure Limits

Valid for Ireland

Ingredient [Regulated substance]	ррт	mg/m ³	~ 1	Short term exposure limit category / Remarks	Regulatory list
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
		F	mg/l	ppm	mg/kg	others	
1,6-hexanediyl bismethacrylate	aqua		0,00488				
6606-59-3	(freshwater)		mg/l				
1,6-hexanediyl bismethacrylate	aqua (marine		0,000488				
6606-59-3	water)		mg/l				
1,6-hexanediyl bismethacrylate	aqua		0,045 mg/l				
6606-59-3	(intermittent						
	releases)						
1,6-hexanediyl bismethacrylate	sediment				0,262		
6606-59-3	(freshwater)				mg/kg		
1,6-hexanediyl bismethacrylate	aqua (marine				0,026		
6606-59-3	water)				mg/kg		
1,6-hexanediyl bismethacrylate 6606-59-3	Soil				0,05 mg/kg		
1,6-hexanediyl bismethacrylate	Sewage		800 mg/l				
6606-59-3	treatment plant						
Hydroquinone	aqua		0,00057				
123-31-9	(freshwater)		mg/l				
Hydroquinone	aqua (marine		0,000057				
123-31-9	water)		mg/l				
Hydroquinone	sediment				0,0049		
123-31-9	(freshwater)				mg/kg		
Hydroquinone	sediment				0,00049		
123-31-9	(marine water)				mg/kg		
Hydroquinone	aqua		0,00134				
123-31-9	(intermittent		mg/l				
	releases)						
Hydroquinone	Soil				0,00064		
123-31-9					mg/kg		
Hydroquinone	sewage		0,71 mg/l				
123-31-9	treatment plant						
	(STP)						

Derived No-Effect Level (DNEL):

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
1,6-hexanediyl bismethacrylate 6606-59-3	Workers	inhalation	Long term exposure - systemic effects		14,5 mg/m3	
1,6-hexanediyl bismethacrylate 6606-59-3	Workers	dermal	Long term exposure - systemic effects		4,2 mg/kg	
1,6-hexanediyl bismethacrylate 6606-59-3	General population	inhalation	Long term exposure - systemic effects		4,3 mg/m3	
1,6-hexanediyl bismethacrylate 6606-59-3	General population	oral	Long term exposure - systemic effects		2,5 mg/kg	
1,6-hexanediyl bismethacrylate 6606-59-3	General population	dermal	Long term exposure - systemic effects		2,5 mg/kg	
Hydroquinone 123-31-9	Workers	dermal	Long term exposure - systemic effects		3,33 mg/kg	
Hydroquinone 123-31-9	Workers	inhalation	Long term exposure - systemic effects		2,1 mg/m3	
Hydroquinone 123-31-9	General population	dermal	Long term exposure - systemic effects		1,66 mg/kg	
Hydroquinone 123-31-9	General population	inhalation	Long term exposure - systemic effects		1,05 mg/m3	
Hydroquinone 123-31-9	General population	oral	Long term exposure - systemic effects		0,6 mg/kg	

Biological Exposure Indices: None

8.2. Exposure controls:

Hand protection:

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)

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
	-
pH	7
Melting point	No data available / Not applicable
Solidification temperature	No data available / Not applicable
Initial boiling point	No data available / Not applicable
Flash point	110 °C (230 °F); no method
Evaporation rate	No data available / Not applicable
Flammability	No data available / Not applicable
Explosive limits	No data available / Not applicable
Vapour pressure	No data available / Not applicable
Relative vapour density:	No data available / Not applicable
Density	0,98 - 1,1 g/cm3
0	
Bulk density	No data available / Not applicable
Solubility	No data available / Not applicable
Solubility (qualitative)	No data available / Not applicable
Partition coefficient: n-octanol/water	No data available / Not applicable
Auto-ignition temperature	No data available / Not applicable
Decomposition temperature	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
Oxidising properties	No data available / Not applicable

9.2. Other information

No data available / Not applicable

SECTION 10: Stability and reactivity

10.1. Reactivity

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.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute oral toxicity:

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances	Value	Value	Species	Method
CAS-No.	type			
Hexanediol	LD50	> 2.000 mg/kg	rat	OECD Guideline 423 (Acute Oral toxicity)
dimethacrylate				
6606-59-3				
Hydroquinone	LD50	367 mg/kg	rat	OECD Guideline 401 (Acute Oral Toxicity)
123-31-9				

Acute dermal toxicity:

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Value type	Value	Species	Method
Hydroquinone 123-31-9	LD50	> 2.000 mg/kg	rabbit	OECD Guideline 402 (Acute Dermal Toxicity)

Acute inhalative toxicity:

No data available.

Skin corrosion/irritation:

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Result	Exposure time	Species	Method
Hydroquinone 123-31-9	not irritating	24 h	rabbit	Weight of evidence

Serious eye damage/irritation:

No data available.

Respiratory or skin sensitization:

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

Hazardous substances	Result	Test type	Species	Method
CAS-No.				
Hexanediol dimethacrylate 6606-59-3	not sensitising	Mouse local lymphnode assay (LLNA)	mouse	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
Hexanediol dimethacrylate 6606-59-3	not sensitising	Guinea pig maximisation test	guinea pig	Magnusson and Kligman Method
Hydroquinone 123-31-9	sensitising	Guinea pig maximisation test	guinea pig	equivalent or similar to OECD Guideline 406 (Skin Sensitisation)
Hydroquinone 123-31-9	sensitising	Mouse local lymphnode assay (LLNA)	mouse	equivalent or similar to OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)

Germ cell mutagenicity:

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Result	Type of study / Route of administration	Metabolic activation / Exposure time	Species	Method
Hexanediol dimethacrylate 6606-59-3	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Hexanediol dimethacrylate 6606-59-3	negative	mammalian cell gene mutation assay	with and without		OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)
Hydroquinone 123-31-9	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		equivalent or similar to OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Hydroquinone 123-31-9	negative	in vitro mammalian chromosome aberration test	with and without		OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)
Hydroquinone 123-31-9	positive	mammalian cell gene mutation assay	with and without		OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)
Hexanediol dimethacrylate 6606-59-3	negative	oral: gavage		mouse	OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)
Hydroquinone 123-31-9	positive	intraperitoneal		mouse	equivalent or similar to OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)
Hydroquinone 123-31-9	negative	oral: gavage		rat	equivalent or similar to OECD Guideline 478 (Genetic Toxicology: Rodent Dominant Lethal Test)
Hydroquinone 123-31-9	positive	intraperitoneal		mouse	equivalent or similar to OECD Guideline 483 (Mammalian Spermatogonial Chromosome Aberration Test)

Carcinogenicity

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

Hazardous components CAS-No.	Result	Route of application	Exposure time / Frequency of treatment	Species	Sex	Method
Hydroquinone 123-31-9	carcinogenic	oral: gavage	103 w 5 d/w	rat	male/female	equivalent or similar OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)
Hydroquinone 123-31-9	carcinogenic	oral: gavage	103 w 5 d/w	mouse	female	equivalent or similar OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)

Reproductive toxicity:

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Result / Value	Test type	Route of application	Species	Method
Hydroquinone 123-31-9	NOAEL P 15 mg/kg NOAEL F1 150 mg/kg NOAEL F2 150 mg/kg	Two generation study	oral: gavage	rat	EPA OTS 798.4700 (Reproduction and Fertility Effects)

STOT-single exposure:

No data available.

STOT-repeated exposure::

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Result / Value	Route of application	Exposure time / Frequency of treatment	Species	Method
Hexanediol dimethacrylate 6606-59-3	NOAEL 300 mg/kg	oral: gavage	5 weeks (male), 8 weeks (fem.) daily	rat	OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
Hydroquinone 123-31-9	NOAEL 50 mg/kg	oral: gavage	13 w 5 d/w	rat	not specified
Hydroquinone 123-31-9	NOAEL 73,9 mg/kg	dermal	13 w 6 h/d, 5 d/w	rat	equivalent or similar to OECD Guideline 411 (Subchronic Dermal Toxicity: 90-Day Study)

Aspiration hazard:

No data available.

SECTION 12: Ecological information

General ecological information:

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

12.1. Toxicity

Toxicity (Fish):

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
Hexanediol dimethacrylate	LC50	4,5 mg/l	96 h	Danio rerio	OECD Guideline 203 (Fish,
6606-59-3					Acute Toxicity Test)
Hydroquinone	LC50	0,638 mg/l	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish,
123-31-9					Acute Toxicity Test)

Toxicity (Daphnia):

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
Hydroquinone 123-31-9	EC50	0,134 mg/l	48 h	I G	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)

Chronic toxicity to aquatic invertebrates

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Value type	Value	Exposure time	Species	Method
	0,0057 mg/l	21 d		OECD 211 (Daphnia magna, Reproduction Test)
t	уре	уре	ype	ype Provide the second sec

Toxicity (Algae):

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
Hydroquinone 123-31-9	EC50	0,335 mg/l		Selenastrum capricornutum (new name: Pseudokirchneriella subcapitata)	OECD Guideline 201 (Alga, Growth Inhibition Test)

Toxicity to microorganisms

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
Hexanediol dimethacrylate 6606-59-3	EC0	800 mg/l	16 h	Pseudomonas putida	ISO 10712: Determination of the inhibitory effect of water constituents on bacteria (Pseudomonas cell inhibition test)
Hydroquinone 123-31-9	EC 50	0,038 mg/l	30 min		not specified

12.2. Persistence and degradability

The product is not biodegradable.

Hazardous substances CAS-No.	Result	Test type	Degradability	Exposure time	Method
Hexanediol dimethacrylate 6606-59-3	readily biodegradable	aerobic	91,1 %	28 d	OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)
Hydroquinone 123-31-9	readily biodegradable	aerobic	75 - 81 %	30 d	EU Method C.4-E (Determination of the "Ready" BiodegradabilityClosed Bottle Test)

12.3. Bioaccumulative potential

No data available.

No substance data available.

12.4. Mobility in soil

Cured adhesives are immobile.

Hazardous substances CAS-No.	LogPow	Temperature	Method
Hexanediol dimethacrylate 6606-59-3	4,08		OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC Method)
Hydroquinone 123-31-9	0,59		EU Method A.8 (Partition Coefficient)

12.5. Results of PBT and vPvB assessment

Hazardous substances	PBT / vPvB
CAS-No.	
Hexanediol dimethacrylate	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
6606-59-3	Bioaccumulative (vPvB) criteria.
Hydroquinone	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
123-31-9	Bioaccumulative (vPvB) criteria.

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

14.2. UN proper shipping name

ADR	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (1,6-
DID	hexanediyl bismethacrylate)
RID	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (1,6- hexanediyl bismethacrylate)
ADN	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (1,6-
	hexanediyl bismethacrylate)
IMDG	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (1,6-
	hexanediyl bismethacrylate)
IATA	Environmentally hazardous substance, liquid, n.o.s. (1,6-hexanediyl bismethacrylate)

14.3. Transport hazard class(es)

ADR	9
RID	9
ADN	9
IMDG	9
ΙΑΤΑ	9

14.4. Packing group

ADR	III
RID	III
ADN	III
IMDG	III
IATA	III

14.5. Environmental hazards

ADR	not applicable
RID	not applicable
ADN	not applicable
IMDG	Marine pollutant
IATA	not applicable

14.6. Special precautions for user

ADR	not applicable
	Tunnelcode:
RID	not applicable
ADN	not applicable
IMDG	not applicable
IATA	not applicable

The transport classifications in this section apply generally to packed and bulk goods alike. For containers with a net volume of no more than 5 L for liquid substances or a net mass of no more than 5 kg for solid substances per individual or inner package, the exemptions SP 375 (ADR), 197 (IATA), 969 (IMDG) may be applied, which can result in a deviation from the transport classification for packed goods.

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:

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.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

H411 Toxic to aquatic life with long lasting effects.

H412 Harmful to aquatic life with long lasting effects.

Further information:

This Safety Data Sheet has been produced for sales from Henkel to parties purchasing from Henkel, is based on Regulation (EC) No 1907/2006 and provides information in accordance with applicable regulations of the European Union only. In that respect, no statement, warranty or representation of any kind is given as to compliance with any statutory laws or regulations of any other jurisdiction or territory other than the European Union. When exporting to territories other than the European Union, please consult with the respective Safety Data Sheet of the concerned territory to ensure compliance or liaise with Henkel's Product Safety and Regulatory Affairs Department (ua-productsafety.de@henkel.com) prior to export to other territories than the European Union.

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.

Dear Customer,

Henkel is committed to creating a sustainable future by promoting opportunities along the entire value chain. If you would like to contribute by switching from a paper to the electronic version of SDS, please contact the local Customer Service representative. We recommend to use a non-personal email address (e.g. SDS@your_company.com).

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.