

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

Page 1 of 16

SDS No.: 173046

V004.2 Revision: 12.06.2017

printing date: 17.01.2020

Replaces version from: 26.06.2015

LOCTITE 5205

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

1.1. Product identifier

LOCTITE 5205

Contains:

2,2'-Ethylenedioxydiethyl dimethacrylate Hydroxypropyl methacrylate

Cumene hydroperoxide

2-Hydroxyethyl methacrylate

Acetic acid, 2-phenylhydrazide

1.2. Relevant identified uses of the substance or mixture and uses advised against

Intended use:

Anaerobic

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):

Serious eye irritation Category 2

H319 Causes serious eye irritation.

Skin sensitizer Category 1

H317 May cause an allergic skin reaction.

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):

MSDS-No.: 173046 LOCTITE 5205 Page 2 of 16

V004.2

Hazard pictogram:



Signal word: Warning

Hazard statement: H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation. H335 May cause respiratory irritation.

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: P261 Avoid breathing vapours.
Prevention P280 Wear protective gloves.

Precautionary statement: P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

Response 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

General chemical description:

Anaerobic Sealant

MSDS-No.: 173046 LOCTITE 5205 Page 3 of 16

V004.2

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

Hazardous components CAS-No.	EC Number REACH-Reg No.	content	Classification
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	203-652-6 01-2119969287-21	10- 20 %	Skin Sens. 1B H317
Hydroxypropyl methacrylate 27813-02-1	248-666-3 01-2119490226-37	1- < 3 %	Skin Sens. 1 H317 Eye Irrit. 2 H319
Cumene hydroperoxide 80-15-9	201-254-7	1-< 2,5 %	Acute Tox. 4; Dermal H312 STOT RE 2 H373 Acute Tox. 4; Oral H302 Org. Perox. E H242 Acute Tox. 3; Inhalation H331 Aquatic Chronic 2 H411 Skin Corr. 1B H314
2-Hydroxyethyl methacrylate 868-77-9	212-782-2 01-2119490169-29	0,1-< 1 %	Skin Irrit. 2 H315 Skin Sens. 1 H317 Eye Irrit. 2 H319
Acetic acid, 2-phenylhydrazide 114-83-0	204-055-3	0,1-< 1 %	Acute Tox. 3; Oral H301 Skin Irrit. 2 H315 Skin Sens. 1 H317 Eye Irrit. 2 H319 STOT SE 3; Inhalation H335 Carc. 2 H351

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.

MSDS-No.: 173046 LOCTITE 5205 Page 4 of 16

V004.2

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

SKIN: Rash, Urticaria.

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

Ensure adequate ventilation.

Wear protective equipment.

Avoid contact with skin and eyes.

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.

Prolonged or repeated skin contact should be avoided to minimise any risk of sensitisation.

Avoid skin and eye contact.

See advice in section 8

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

Store in sealed original container.

Refer to Technical Data Sheet

MSDS-No.: 173046 LOCTITE 5205 Page 5 of 16

V004.2

7.3. Specific end use(s)

Anaerobic

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
Silane, dichlorodimethyl-, reaction products with silica 68611-44-9 [SILICA, AMORPHOUS, RESPIRABLE DUST]		2,4	Time Weighted Average (TWA):		EH40 WEL
Silane, dichlorodimethyl-, reaction products with silica 68611-44-9 [SILICA, AMORPHOUS, INHALABLE DUST]		6	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
Silane, dichlorodimethyl-, reaction products with silica 68611-44-9 [SILICA, AMORPHOUS, TOTAL INHALABLE DUST]		6	Time Weighted Average (TWA):		IR_OEL
Silane, dichlorodimethyl-, reaction products with silica 68611-44-9 [SILICA, AMORPHOUS, RESPIRABLE DUST!		2,4	Time Weighted Average (TWA):		IR_OEL

MSDS-No.: 173046 LOCTITE 5205 Page 6 of 16

V004.2

$\label{eq:predicted} \textbf{Predicted No-Effect Concentration (PNEC):}$

Name on list	Environmental Compartment	Exposure period	Value				Remarks
		•	mg/l	ppm	mg/kg	others	
2,2'-Ethylenedioxydiethyl dimethacrylate	aqua		0,164 mg/l				
109-16-0	(freshwater)		0.0164				
2,2'-Ethylenedioxydiethyl dimethacrylate	aqua (marine water)		0,0164 mg/l				
2,2'-Ethylenedioxydiethyl dimethacrylate	sewage		10 mg/l				
109-16-0	treatment plant (STP)		10 mg/1				
2,2'-Ethylenedioxydiethyl dimethacrylate	aqua		0,164 mg/l				
109-16-0	(intermittent releases)						
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	sediment (freshwater)				1,85 mg/kg		
2,2'-Ethylenedioxydiethyl dimethacrylate	sediment				0,185		
109-16-0	(marine water)				mg/kg		
2,2'-Ethylenedioxydiethyl dimethacrylate	soil				0,274		
109-16-0					mg/kg		
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	Air						
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	Predator						
Methacrylic acid, monoester with propane- 1,2-diol 27813-02-1	aqua (freshwater)		0,904 mg/l				
Methacrylic acid, monoester with propane-	aqua (marine		0,904 mg/l				
1,2-diol 27813-02-1	water)		, ,				
Methacrylic acid, monoester with propane-	sewage		10 mg/l				
1,2-diol	treatment plant						
27813-02-1	(STP)		0.072 //				
Methacrylic acid, monoester with propane- 1,2-diol	aqua (intermittent		0,972 mg/l				
27813-02-1	releases)						
Methacrylic acid, monoester with propane-	sediment				6,28 mg/kg		
1,2-diol 27813-02-1	(freshwater)						
Methacrylic acid, monoester with propane-	sediment				6,28 mg/kg		
1,2-diol 27813-02-1	(marine water)						
Methacrylic acid, monoester with propane-	soil				0,727		
1,2-diol	SOII				mg/kg		
27813-02-1					88		
.alpha.,.alphaDimethylbenzyl	aqua		0,0031				
hydroperoxide	(freshwater)		mg/l				
80-15-9 .alpha.,.alphaDimethylbenzyl	aqua (marine		0,00031				
hydroperoxide 80-15-9	water)		mg/l				
.alpha.,.alphaDimethylbenzyl	aqua		0,031 mg/l				
hydroperoxide 80-15-9	(intermittent releases)						
.alpha.,.alphaDimethylbenzyl	Sewage		0,35 mg/l				
hydroperoxide 80-15-9	treatment plant						
.alpha.,.alphaDimethylbenzyl	sediment				0,023		
hydroperoxide 80-15-9	(freshwater)				mg/kg		
.alpha.,.alphaDimethylbenzyl	sediment		1		0,0023		
hydroperoxide 80-15-9	(marine water)				mg/kg		
.alpha.,.alphaDimethylbenzyl	soil				0,0029		
hydroperoxide 80-15-9					mg/kg		
2-Hydroxyethyl methacrylate 868-77-9	aqua (freshwater)		0,482 mg/l				
2-Hydroxyethyl methacrylate	aqua (marine	-	0,482 mg/l	1			
868-77-9	water)						
2-Hydroxyethyl methacrylate	sewage		10 mg/l				
868-77-9	treatment plant (STP)						

MSDS-No.: 173046 LOCTITE 5205 Page 7 of 16

V004.2

2-Hydroxyethyl methacrylate 868-77-9	aqua (intermittent releases)	1 mg/l		
2-Hydroxyethyl methacrylate 868-77-9	sediment (freshwater)		3,79 mg/kg	
2-Hydroxyethyl methacrylate 868-77-9	sediment (marine water)		3,79 mg/kg	
2-Hydroxyethyl methacrylate 868-77-9	soil		0,476 mg/kg	
2-Hydroxyethyl methacrylate 868-77-9	Predator			

Derived No-Effect Level (DNEL):

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	Workers	inhalation	Long term exposure - systemic effects		48,5 mg/m3	
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	Workers	dermal	Long term exposure - systemic effects		13,9 mg/kg	
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	General population	inhalation	Long term exposure - systemic effects		14,5 mg/m3	
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	General population	dermal	Long term exposure - systemic effects		8,33 mg/kg	
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	General population	oral	Long term exposure - systemic effects		8,33 mg/kg	
Methacrylic acid, monoester with propane- 1,2-diol 27813-02-1	Workers	dermal	Long term exposure - systemic effects		4,2 mg/kg	
Methacrylic acid, monoester with propane- 1,2-diol 27813-02-1	Workers	Inhalation	Long term exposure - systemic effects		14,7 mg/m3	
Methacrylic acid, monoester with propane- 1,2-diol 27813-02-1	General population	dermal	Long term exposure - systemic effects		2,5 mg/kg	
Methacrylic acid, monoester with propane- 1,2-diol 27813-02-1	General population	Inhalation	Long term exposure - systemic effects		8,8 mg/m3	
Methacrylic acid, monoester with propane- 1,2-diol 27813-02-1	General population	oral	Long term exposure - systemic effects		2,5 mg/kg	
.alpha.,.alphaDimethylbenzyl hydroperoxide 80-15-9	Workers	inhalation	Long term exposure - systemic effects		6 mg/m3	
2-Hydroxyethyl methacrylate 868-77-9	Workers	dermal	Long term exposure - systemic effects		1,3 mg/kg	
2-Hydroxyethyl methacrylate 868-77-9	Workers	Inhalation	Long term exposure - systemic effects		4,9 mg/m3	
2-Hydroxyethyl methacrylate 868-77-9	General population	dermal	Long term exposure - systemic effects		0,83 mg/kg	
2-Hydroxyethyl methacrylate 868-77-9	General population	Inhalation	Long term exposure - systemic effects		2,9 mg/m3	
2-Hydroxyethyl methacrylate 868-77-9	General population	oral	Long term exposure - systemic effects		0,83 mg/kg	

MSDS-No.: 173046 LOCTITE 5205 Page 8 of 16

V004.2

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:

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 liquid red Odor mild

Odour threshold No data available / Not applicable

pH Not applicable

Melting point No data available / Not applicable Solidification temperature No data available / Not applicable

Initial boiling point $> 150 \, ^{\circ}\text{C} \, (> 302 \, ^{\circ}\text{F})$

Flash point > 100 °C (> 212 °F); Tagliabue closed cup

Evaporation rate Not available.

Flammability No data available / Not applicable Explosive limits No data available / Not applicable

Vapour pressure < 5 mm hg

(25 °C (77 °F))

Relative vapour density: Not available.
Density 1,1 g/cm3

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MSDS-No.: 173046 LOCTITE 5205 Page 9 of 16

V004.2

Bulk density

No data available / Not applicable
Solubility

No data available / Not applicable

Solubility (qualitative) Slight

(Solvent: Water)

Partition coefficient: n-octanol/water

Auto-ignition temperature

Decomposition temperature

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

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:

This material is considered to have low toxicity if swallowed.

Skin irritation:

Prolonged or repeated contact may cause skin irritation.

Eye irritation:

Causes serious eye irritation.

Sensitizing:

May cause an allergic skin reaction.

MSDS-No.: 173046 LOCTITE 5205 Page 10 of 16

V004.2

Acute oral toxicity:

Hazardous components	Value	Value	Route of	Exposure	Species	Method
CAS-No.	type		application	time		
2,2'-Ethylenedioxydiethyl	LD50	10.837 mg/kg	oral		rat	not specified
dimethacrylate						
109-16-0						
Hydroxypropyl	LD50	> 2.000 mg/kg	oral		rat	OECD Guideline 401 (Acute
methacrylate						Oral Toxicity)
27813-02-1						
Cumene hydroperoxide	LD50	550 mg/kg	oral		rat	not specified
80-15-9						
2-Hydroxyethyl	LD50	> 5.000 mg/kg	oral		rat	not specified
methacrylate						
868-77-9						

Acute inhalative toxicity:

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

Acute dermal toxicity:

Hazardous components	Value	Value	Route of	Exposure	Species	Method
CAS-No.	type		application	time		
2,2'-Ethylenedioxydiethyl	LD50	> 2.000 mg/kg	dermal		mouse	not specified
dimethacrylate						
109-16-0						
Hydroxypropyl	LD50	> 5.000 mg/kg	dermal		rabbit	not specified
methacrylate						
27813-02-1						
Cumene hydroperoxide	LD50	1.200 - 1.520	dermal			not specified
80-15-9		mg/kg				
2-Hydroxyethyl	LD50	> 5.000 mg/kg	dermal		rabbit	not specified
methacrylate						_
868-77-9						

Skin corrosion/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	not irritating	24 h	rabbit	Draize Test
Hydroxypropyl methacrylate 27813-02-1	not irritating	24 h	rabbit	Draize Test
Cumene hydroperoxide 80-15-9	corrosive		rabbit	Draize Test

Serious eye damage/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	not irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
2-Hydroxyethyl methacrylate 868-77-9	irritating		rabbit	Draize Test

${\bf Respiratory\ or\ skin\ sensitization:}$

Hazardous components CAS-No.	Result	Test type	Species	Method
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	sensitising	Mouse local lymphnod	mouse	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
		e assay (LLNA)		

MSDS-No.: 173046 LOCTITE 5205 Page 11 of 16

V004.2

Germ cell mutagenicity:

Hazardous components CAS-No.	Result	Type of study / Route of administration	Metabolic activation / Exposure time	Species	Method
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	negative	mammalian cell gene mutation assay	with and without		OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)
	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
	negative	in vitro mammalian cell micronucleus test	with and without		OECD Guideline 487 (In vitro Mammalian Cell Micronucleus Test)
Hydroxypropyl methacrylate 27813-02-1	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		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)
Hydroxypropyl methacrylate 27813-02-1	negative	oral: gavage		rat	OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)
Cumene hydroperoxide 80-15-9	positive	bacterial reverse mutation assay (e.g Ames test)	without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Cumene hydroperoxide 80-15-9	negative	dermal		mouse	not specified
2-Hydroxyethyl methacrylate 868-77-9	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
	positive	in vitro mammalian chromosome aberration test	with and without		OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)
	negative	mammalian cell gene mutation assay	with and without		OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)
	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 472 (Genetic Toxicology: Escherichia coli, Reverse Mutation Assay)
2-Hydroxyethyl methacrylate 868-77-9	negative	oral: gavage		rat	OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)

Carcinogenicity:

Hazardous components CAS-No.	Result	Species	Sex	Exposure timeFrequenc y of treatment	Route of application	Method
Hydroxypropyl methacrylate 27813-02-1		rat	male	2 years (102 weeks) 6 hours/day, 5 days/week	inhalation	OECD Guideline 451 (Carcinogenicity Studies)
2-Hydroxyethyl methacrylate 868-77-9		rat	female	102 weeks 6 hours/day, 5 days/week	inhalation	OECD Guideline 451 (Carcinogenicity Studies)

MSDS-No.: 173046 LOCTITE 5205 Page 12 of 16

V004.2

Reproductive toxicity:

Hazardous substances	Result / Classification	Species	Exposure	Species	Method
CAS-No.			time		
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	NOAEL P = 1.000 mg/kg NOAEL F1 = 1.000 mg/kg	oral: gavage		rat	OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
Hydroxypropyl methacrylate 27813-02-1	NOAEL P = 400 mg/kg	two- generation study oral: gavage	until one day before sacrifice	rat	OECD Guideline 416 (Two- Generation Reproduction Toxicity Study)
2-Hydroxyethyl methacrylate 868-77-9	NOAEL P = >= 1.000 mg/kg NOAEL F1 = >= 1.000 mg/kg	screening oral: gavage		rat	OECD Combined Repeated Dose and Reproductive / Developmental Toxicity Screening Test (Precursor Protocol of GL 422)

Repeated dose toxicity

Hazardous components CAS-No.	Result	Route of application	Exposure time / Frequency of treatment	Species	Method
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	NOAEL=1.000 mg/kg	oral: gavage	daily	rat	OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
Hydroxypropyl methacrylate 27813-02-1	NOAEL=300 mg/kg	oral: gavage		rat	OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
Cumene hydroperoxide 80-15-9		inhalation: aerosol	6 h/d5 d/w	rat	not specified
2-Hydroxyethyl methacrylate 868-77-9	NOAEL=100 mg/kg	oral: gavage	once daily	rat	OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)

SECTION 12: Ecological information

General ecological information:

The mixture is classified based on the available hazard information for the ingredients as defined in the classification criteria for mixtures for each hazard class or differentiation in Annex I to Regulation (EC) No 1272/2008. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.

Cured Loctite products are typical polymers and do not pose any immediate environmental hazards.

Precautions required with respect to Environmental Hazards of articles in which this product is used should be considered.

12.1. Toxicity

Ecotoxicity:

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

Page 13 of 16 MSDS-No.: 173046 LOCTITE 5205

V004.2

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Hazardous components CAS-No.	Value type	Value	Acute Toxicity Study	Exposure time	Species	Method
2,2'-Ethylenedioxydiethyl	LC50	16,4 mg/l	Fish	96 h	Danio rerio	OECD Guideline
dimethacrylate						203 (Fish, Acute
109-16-0 2,2'-Ethylenedioxydiethyl	EC50	> 100 mg/l	Algae	72 h	Pseudokirchnerella subcapitata	Toxicity Test) OECD Guideline
dimethacrylate			1 8			201 (Alga, Growth
109-16-0	NOEC	18,6 mg/l	Algae	72 h	Pseudokirchnerella subcapitata	Inhibition Test) OECD Guideline
	NOLC	16,6 mg/1	Aigac	7211	i seudokireimerena subcapitata	201 (Alga, Growth
20154 1 1 1 1 1 1	NOEG	22 /	, .	21.1	D 1 '	Inhibition Test)
2,2'-Ethylenedioxydiethyl dimethacrylate	NOEC	32 mg/l	chronic Daphnia	21 d	Daphnia magna	OECD 211 (Daphnia magna,
109-16-0	* 050	402 #		40.1		Reproduction Test)
Hydroxypropyl methacrylate 27813-02-1	LC50	493 mg/l	Fish	48 h	Leuciscus idus melanotus	DIN 38412-15
Hydroxypropyl methacrylate	EC50	> 143 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline
27813-02-1						202 (Daphnia sp. Acute
						Immobilisation
Hydroxypropyl methacrylate	EC50	> 97,2 mg/l	Algae	72 h	Pseudokirchnerella subcapitata	Test) OECD Guideline
27813-02-1	LC30	> 71,2 mg/1	riigac	7211	i seudokireimerena subcapitata	201 (Alga, Growth
	NOEC	> 97,2 mg/l	Algae	72 h	Pseudokirchnerella subcapitata	Inhibition Test) OECD Guideline
	NOEC	> 97,2 mg/1	Aigae	/211	r seudokircinierena subcapitata	201 (Alga, Growth
Uvduovvumuonvil motho omiloto	EC10	1 140 mg/l	Dantonia	16 h		Inhibition Test)
Hydroxypropyl methacrylate 27813-02-1	ECIU	1.140 mg/l	Bacteria	16 h		not specified
Hydroxypropyl methacrylate	NOEC	45,2 mg/l	chronic	21 d	Daphnia magna	OECD 211
27813-02-1			Daphnia			(Daphnia magna, Reproduction Test)
Cumene hydroperoxide	LC50	3,9 mg/l	Fish	96 h	Oncorhynchus mykiss	OECD Guideline
80-15-9						203 (Fish, Acute Toxicity Test)
Cumene hydroperoxide 80-15-9	EC50	18 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline
60-13-9						202 (Daphnia sp. Acute
						Immobilisation
Cumene hydroperoxide	ErC50	3,1 mg/l	Algae	72 h	Pseudokirchnerella subcapitata	Test) OECD Guideline
80-15-9					•	201 (Alga, Growth
Cumene hydroperoxide	EC10	70 mg/l	Bacteria	30 min		Inhibition Test) not specified
80-15-9 2-Hydroxyethyl methacrylate	LC50	> 100 mg/l	Fish	96 h	Oryzias latipes	OECD Guideline
868-77-9	LC30	> 100 mg/1	1 1511	90 II	Oryzias latipes	203 (Fish, Acute
2-Hydroxyethyl methacrylate	EC50	380 mg/l	Daphnia	48 h	Daphnia magna	Toxicity Test) OECD Guideline
868-77-9	ECSO	360 Hig/1	Бариша	46 11	Б ариша шадпа	202 (Daphnia sp.
						Acute Immobilisation
						Test)
2-Hydroxyethyl methacrylate 868-77-9	EC50	836 mg/l	Algae	72 h	Selenastrum capricornutum (new name: Pseudokirchnerella	OECD Guideline 201 (Alga, Growth
000-77-9					subcapitata)	Inhibition Test)
	NOEC	400 mg/l	Algae	72 h	Selenastrum capricornutum (new name: Pseudokirchnerella	OECD Guideline 201 (Alga, Growth
					subcapitata)	Inhibition Test)
2-Hydroxyethyl methacrylate 868-77-9	EC0	> 3.000 mg/l	Bacteria	16 h	Pseudomonas fluorescens	other guideline:
2-Hydroxyethyl methacrylate	NOEC	24,1 mg/l	chronic	21 d	Daphnia magna	OECD 211
868-77-9		-	Daphnia		_	(Daphnia magna,
1			I	I	I	Reproduction Test)

12.2. Persistence and degradability

Persistence and Biodegradability: The product is not biodegradable.

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

MSDS-No.: 173046 LOCTITE 5205 Page 14 of 16

V004.2

2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	readily biodegradable	aerobic	85 %	OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)
Hydroxypropyl methacrylate 27813-02-1	readily biodegradable	aerobic	94,2 %	OECD Guideline 301 E (Ready biodegradability: Modified OECD Screening Test)
Cumene hydroperoxide 80-15-9		no data	0 %	OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)
2-Hydroxyethyl methacrylate 868-77-9	readily biodegradable	aerobic	92 - 100 %	OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I))

12.3. Bioaccumulative potential / 12.4. Mobility in soil

Mobility:

Cured adhesives are immobile.

Bioaccumulative potential:

No data available.

Hazardous components	LogPow	Bioconcentration	Exposure	Species	Temperature	Method
CAS-No.		factor (BCF)	time			
2,2'-Ethylenedioxydiethyl	2,3					OECD Guideline 117
dimethacrylate						(Partition Coefficient (n-
109-16-0						octanol / water), HPLC
						Method)
Hydroxypropyl methacrylate	0,97				20 °C	not specified
27813-02-1						
Cumene hydroperoxide		9,1		calculation		OECD Guideline 305
80-15-9						(Bioconcentration: Flow-
						through Fish Test)
Cumene hydroperoxide	2,16					not specified
80-15-9						_
2-Hydroxyethyl methacrylate	0,42				25 °C	OECD Guideline 107
868-77-9						(Partition Coefficient (n-
						octanol / water), Shake
						Flask Method)
Acetic acid, 2-	0,74					not specified
phenylhydrazide						
114-83-0						

12.5. Results of PBT and vPvB assessment

Hazardous components	PBT/vPvB
CAS-No.	
2,2'-Ethylenedioxydiethyl dimethacrylate	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
109-16-0	Bioaccumulative (vPvB) criteria.
Hydroxypropyl methacrylate	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
27813-02-1	Bioaccumulative (vPvB) criteria.
Cumene hydroperoxide	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
80-15-9	Bioaccumulative (vPvB) criteria.
2-Hydroxyethyl methacrylate	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
868-77-9	Bioaccumulative (vPvB) criteria.

12.6. Other adverse effects

No data available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

MSDS-No.: 173046 LOCTITE 5205 Page 15 of 16

V004.2

Product disposal:

Dispose of in accordance with local and national regulations.

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

Disposal of uncleaned packages:

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

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 %

15.2. Chemical safety assessment

A chemical safety assessment has not been carried out.

MSDS-No.: 173046 LOCTITE 5205 Page 16 of 16

V004.2

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:

- H242 Heating may cause a fire.
- H301 Toxic if swallowed.
- H302 Harmful if swallowed.
- H312 Harmful in contact with skin.
- H314 Causes severe skin burns and eye damage.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H319 Causes serious eye irritation.
- H331 Toxic if inhaled.
- H335 May cause respiratory irritation.
- H351 Suspected of causing cancer.
- H373 May cause damage to organs through prolonged or repeated exposure.
- H411 Toxic 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.