

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

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LOCTITE 638 RETAINING COMPOUND SLIP FIT known as 638 Retaining Compd 1000ML JP

SDS No. : 153473 V004.1 Revision: 13.07.2015 printing date: 06.09.2016 Replaces version from: 17.04.2015

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

1.1. Product identifier

LOCTITE 638 RETAINING COMPOUND SLIP FIT known as 638 Retaining Compd 1000ML JP

Contains:

Hydroxypropyl methacrylate Acrylic acid 2,2'-Ethylenedioxydiethyl dimethacrylate Acetic acid, 2-phenylhydrazide 2-Hydroxyethyl methacrylate

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@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):

 issification (CEI).	
Skin irritation	Category 2
H315 Causes skin 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	
Chronic hazards to the aquatic environment	Category 3
H412 Harmful to aquatic life with long lasting effects.	
Serious eye damage	Category 1
H318 Causes serious eye damage.	

2.2. Label elements	
Label elements (CLP):	
Hazard pictogram:	
Signal word:	Danger
Hazard statement:	 H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H335 May cause respiratory irritation. H412 Harmful to aquatic life with long lasting effects.
Precautionary statement:	***For consumer use only: P101 If medical advice is needed, have product container or label at hand. P102 Keep out of reach of children. P501 Dispose of waste and residues in accordance with local authority requirements***
Precautionary statement: Prevention	P261 Avoid breathing vapours.P273 Avoid release to the environment.P280 Wear protective gloves/eye protection.
Precautionary statement: Response	P302+P352 IF ON SKIN: Wash with plenty of water. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

2.3. Other hazards

Non corrosive to skin in accordance with the in vitro test method, B40 skin corrosion - Human skin model assay, equivalent to test method OECD 431 or based on analogy to similar products tested.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

General chemical description: Methacrylate resin based product containing Acrylic Acid Base substances of preparation: Methacrylates

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

Hazardous components CAS-No.	EC Number REACH-Reg No.	content	Classification
Hydroxypropyl methacrylate 27813-02-1	248-666-3 01-2119490226-37	25- 50 %	Skin Sens. 1 H317 Eye Irrit. 2 H319
Acrylic acid 79-10-7	201-177-9 01-2119452449-31	5- < 10 %	Flam. Liq. 3 H226 Acute Tox. 4; Oral H302 Acute Tox. 4; Dermal H312 Skin Corr. 1A H314 Acute Tox. 4; Inhalation H332 STOT SE 3 H335 Aquatic Acute 1 H400 Aquatic Chronic 2 H411
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	203-652-6 01-2119969287-21	1-< 5 %	Skin Sens. 1B H317
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
Methacrylic acid 79-41-4	201-204-4 01-2119463884-26	1-< 3%	Acute Tox. 4; Oral H302 Acute Tox. 3; Dermal H311 Acute Tox. 4; Inhalation H332 Skin Corr. 1A H314
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
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

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

SECTION 4: First aid measures

4.1. Description of first aid measures

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

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

Eye contact:

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

Ingestion:

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

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

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

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 skin and eye contact.

6.2. Environmental precautions

Do not let product enter drains.

6.3. Methods and material for containment and cleaning up

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

6.4. Reference to other sections

See advice in section 8

SECTION 7: Handling and storage

7.1. Precautions for safe handling

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

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 original containers at $8-21^{\circ}C$ (46.4-69.8°F) and do not return residual materials to containers as contamination may reduce the shelf life of the bulk product.

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
Methacrylic acid 79-41-4 [METHACRYLIC ACID]	40	143	Short Term Exposure Limit (STEL):		EH40 WEL
Methacrylic acid 79-41-4 [METHACRYLIC ACID]	20	72	Time Weighted Average (TWA):		EH40 WEL
Cumene 98-82-8 [CUMENE]	50	250	Short Term Exposure Limit (STEL):		EH40 WEL
Cumene 98-82-8 [CUMENE]			Skin designation:	Can be absorbed through the skin.	EH40 WEL
Cumene 98-82-8 [CUMENE]	25	125	Time Weighted Average (TWA):		EH40 WEL
Cumene 98-82-8 [CUMENE]	50	250	Short Term Exposure Limit (STEL):	Indicative	ECTLV
Cumene 98-82-8 [CUMENE]	20	100	Time Weighted Average (TWA):	Indicative	ECTLV

Predicted No-Effect Concentration (PNEC):

Name on list	Environmental Compartment	Exposure period	Value				Remarks
	Compartment	periou	mg/l	ppm	mg/kg	others	
Methacrylic acid, monoester with propane-	aqua					0,904 mg/L	
1,2-diol	(freshwater)						
27813-02-1							
Methacrylic acid, monoester with propane-	aqua (marine					0,904 mg/L	
1,2-diol	water)						
27813-02-1							
Methacrylic acid, monoester with propane-	STP					10 mg/L	
1,2-diol							
27813-02-1							
Methacrylic acid, monoester with propane-	aqua					0,972 mg/L	
1,2-diol	(intermittent						
27813-02-1	releases)						
Methacrylic acid, monoester with propane-	sediment				6,28 mg/kg		
1,2-diol	(freshwater)						
27813-02-1							
Methacrylic acid, monoester with propane-	sediment				6,28 mg/kg		
1,2-diol	(marine water)						
27813-02-1							
Methacrylic acid, monoester with propane-	soil				0,727		
1,2-diol					mg/kg		
27813-02-1							
Acrylic acid	aqua					0,003 mg/L	
79-10-7	(freshwater)					0.0000 7	
Acrylic acid	aqua (marine					0,0003 mg/L	
79-10-7	water)					0.0010 7	
Acrylic acid	aqua					0,0013 mg/L	
79-10-7	(intermittent						
A 1' '1	releases)					0.0 7	
Acrylic acid 79-10-7	STP					0,9 mg/L	
Acrylic acid	sediment				0,0236		
79-10-7	(freshwater)				0,0230 mg/kg		
Acrylic acid	sediment				0,00236		
79-10-7	(marine water)				0,00230 mg/kg		
Acrylic acid	soil	ł			1 mg/kg		
79-10-7	5011				1 mg/kg		
Acrylic acid	oral				0,0023		
79-10-7	orai				mg/kg		
Acrylic acid	Predator				0,03 g/kg		
79-10-7	ricultor				0,05 8/18		
2,2'-Ethylenedioxydiethyl dimethacrylate	aqua					0,164 mg/L	
109-16-0	(freshwater)					0,101111912	
2,2'-Ethylenedioxydiethyl dimethacrylate	aqua (marine					0,0164 mg/L	
109-16-0	water)					-,	
2,2'-Ethylenedioxydiethyl dimethacrylate	STP					10 mg/L	
109-16-0	~						
2,2'-Ethylenedioxydiethyl dimethacrylate	aqua					0,164 mg/L	
109-16-0	(intermittent					.,	
	releases)						
2,2'-Ethylenedioxydiethyl dimethacrylate	sediment				1,85 mg/kg		
109-16-0	(freshwater)						
2,2'-Ethylenedioxydiethyl dimethacrylate	sediment		1		0,185		
109-16-0	(marine water)				mg/kg		
2,2'-Ethylenedioxydiethyl dimethacrylate	Soil		1		0,274		
109-16-0					mg/kg		
Methacrylic acid	aqua					0,82 mg/L	
79-41-4	(freshwater)			1			

Derived No-Effect Level (DNEL):

1,2-diol 27813-02-1exposure - systemic effectsMethacrylic acid, monoester with propane- 1,2-diol 27813-02-1WorkersInhalationLong term exposure - systemic effects14,7 mMethacrylic acid, monoester with propane- 1,2-diolgeneral populationDermalLong term exposure - systemic effects2,5 m	ng/kg bw/day mg/m3
27813-02-1systemic effectsMethacrylic acid, monoester with propane- 1,2-diol 27813-02-1WorkersInhalation exposure - 	mg/m3
Methacrylic acid, monoester with propane- 1,2-diol 27813-02-1WorkersInhalationLong term exposure - systemic effects14,7 rMethacrylic acid, monoester with propane- 1,2-diolgeneral populationDermalLong term exposure -2,5 m	mg/m3
1,2-diolexposure -27813-02-1systemic effectsMethacrylic acid, monoester with propane- 1,2-diolgeneral populationDermal exposure -Long term exposure -	6
Methacrylic acid, monoester with propane- 1,2-diolgeneral populationDermalLong term exposure -2,5 m	
1,2-diol population exposure -	
	ng/kg bw/day
27813-02-1 systemic effects	
Methacrylic acid, monoester with propane- general Inhalation Long term 8,8 m	ng/m3
1,2-diol population exposure - 27813-02-1 systemic effects	
· · · · · · · · · · · · · · · · · · ·	ng/kg bw/day
1,2-diol population exposure -	12/ NG 0 11/ duy
27813-02-1 systemic effects	
Acrylic acid Workers Inhalation Long term 30 mg 79-10-7 action 2010 action 201	g/m3
effects	
Acrylic acid Workers Inhalation Acute/short term 30 mg	g/m3
79-10-7 exposure - local	-
effects Acrylic acid Workers Dermal Acute/short term 1 mg/	/om2
79-10-7 workers Dermai Activision term 1 mg/	/0112
effects	
Acrylic acid general Dermal Acute/short term 1 mg/	/cm2
79-10-7 population exposure - local effects	
Acrylic acid general inhalation Acute/short term 3,6 m	ng/m3
79-10-7 population exposure - local	
effects	
Acrylic acid general inhalation Long term 3,6 m 79-10-7 population exposure - local	ng/m3
effects	
	mg/m3
109-16-0 exposure -	
systemic effects 2,2'-Ethylenedioxydiethyl dimethacrylate Workers Dermal Long term 13,9 r	mg/kg bw/day
109-16-0	ing/kg bw/ddy
systemic effects	
2,2'-Ethylenedioxydiethyl dimethacrylate general inhalation Long term 14,5 r 109-16-0 population exposure -	mg/m3
systemic effects	
	mg/kg bw/day
109-16-0 population exposure -	
systemic effects 2,2'-Ethylenedioxydiethyl dimethacrylate general oral Long term 8,33 r	mg/kg bw/day
109-16-0 population exposure -	ling/kg bw/day
systemic effects	
Methacrylic acid Workers Inhalation Long term 88 mg	g/m3
79-41-4 exposure - local effects	
	mg/m3
79-41-4 exposure -	č –
systemic effects	
Methacrylic acid Workers Dermal Long term 4,25 r 79-41-4	mg/kg bw/day
systemic effects	
Methacrylic acid general Inhalation Long term 6,55 r	mg/m3
79-41-4 population exposure - local	
Methacrylic acid general Inhalation Long term 6,3 m	19/m3
79-41-4 population exposure -	-0
systemic effects	
Methacrylic acid general population Dermal Long term 2,55 r	mg/kg bw/day
your -4 population exposure - systemic effects	

Biological Exposure Indices:

None

8.2. Exposure controls:

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

Hand protection:

Chemical-resistant protective gloves (EN 374). Suitable materials for short-term contact or splashes (recommended: at least protection index 2, corresponding to > 30 minutes permeation time as per EN 374):

nitrile rubber (NBR; >= 0.4 mm thickness)

Suitable materials for longer, direct contact (recommended: protection index 6, corresponding to > 480 minutes permeation time as per EN 374):

nitrile rubber (NBR; >= 0.4 mm thickness)

This information is based on literature references and on information provided by glove manufacturers, or is derived by analogy with similar substances. Please note that in practice the working life of chemical-resistant protective gloves may be considerably shorter than the permeation time determined in accordance with EN 374 as a result of the many influencing factors (e.g. temperature). If signs of wear and tear are noticed then the gloves should be replaced.

Eye protection: Wear protective glasses.

Skin protection: Wear suitable protective clothing.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	liquid
	green
Odor	irritating
Odour threshold	No data available / Not applicable
	No data available / Not applicable
pH Initial hailing point	> 100.0 °C (> 212 °F)
Initial boiling point	> 93,3 °C (> 199.94 °F); Tagliabue closed cup
Flash point	No data available / Not applicable
Decomposition temperature Vapour pressure	< 4,0000000 mbar
(20 °C (68 °F))	< 4,000000 mbai
	< 300 mbar
Vapour pressure (50 °C (122 °F))	< 500 mbar
	1.0500 a/am2
Density ()	1,0500 g/cm3
Bulk density	No data available / Not applicable
Viscosity	No data available / Not applicable
Viscosity (kinematic)	No data available / Not applicable
Explosive properties	No data available / Not applicable
Solubility (qualitative)	Miscible
(Solvent: Acetone)	MISCIDIE
Solidification temperature	No data available / Not applicable
Melting point	No data available / Not applicable No data available / Not applicable
Flammability	No data available / Not applicable
	No data available / Not applicable
Auto-ignition temperature	11
Explosive limits Partition coefficient: n-octanol/water	No data available / Not applicable
	No data available / Not applicable
Evaporation rate	No data available / Not applicable
Vapor density	No data available / Not applicable
Oxidising properties	No data available / Not applicable

9.2. Other information

No data available / Not applicable

SECTION 10: Stability and reactivity

10.1. Reactivity

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

No decomposition if used according to specifications.

10.5. Incompatible materials

See section reactivity

10.6. Hazardous decomposition products

None if used for intended purpose.

In case of fire toxic gases can be released.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

General toxicological information:

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

STOT-single exposure:

May cause respiratory irritation.

Oral toxicity:

This material is considered to have low toxicity if swallowed. May cause irritation to the digestive tract.

Skin irritation:

Causes skin irritation.

Non corrosive to skin in accordance with the in vitro test method, B40 skin corrosion - Human skin model assay, equivalent to test method OECD 431 or based on analogy to similar products tested.

Eye irritation:

Causes serious eye damage.

Sensitizing:

May cause an allergic skin reaction.

Acute oral toxicity:

Hazardous components	Value	Value	Route of	Exposure	Species	Method
CAS-No.	type		application	time	_	
Hydroxypropyl methacrylate 27813-02-1	LD50	> 2.000 mg/kg	oral		rat	OECD Guideline 401 (Acute Oral Toxicity)
Acrylic acid 79-10-7	LD50	1.500 mg/kg	oral		rat	BASF Test
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	LD50	10.837 mg/kg	oral		rat	
Cumene hydroperoxide 80-15-9	LD50	550 mg/kg	oral		rat	
Methacrylic acid 79-41-4	LD50	1.320 mg/kg	oral		rat	OECD Guideline 401 (Acute Oral Toxicity)

Acute inhalative toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Acrylic acid	LC50	> 5,1 mg/l	Vapor.	4 h	rat	OECD Guideline 403 (Acute
79-10-7						Inhalation Toxicity)
Methacrylic acid	LC50	4,7 mg/l	inhalation	4 h	rat	OECD Guideline 403 (Acute
79-41-4		-				Inhalation Toxicity)

Acute dermal toxicity:

Hazardous components	Value	Value	Route of	Exposure	Species	Method
CAS-No.	type		application	time		
Hydroxypropyl methacrylate 27813-02-1	LD50	> 5.000 mg/kg	dermal		rabbit	
Acrylic acid 79-10-7	LD50	640 mg/kg	dermal		rabbit	BASF Test
Methacrylic acid 79-41-4	Acute toxicity estimate (ATE)	500 mg/kg	dermal			Expert judgement
Methacrylic acid 79-41-4	LD50	500 - 1.000 mg/kg			rabbit	Dermal Toxicity Screening
2-Hydroxyethyl methacrylate 868-77-9	LD50	> 3.000 mg/kg	dermal		rabbit	

Skin corrosion/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
Acrylic acid 79-10-7	highly corrosive	3 min	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
Cumene hydroperoxide 80-15-9	corrosive		rabbit	Draize Test
Methacrylic acid 79-41-4	Category 1A (corrosive)	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

Serious eye damage/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
Acrylic acid 79-10-7	corrosive	21 d	rabbit	BASF Test
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	slightly irritating	24 h	rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)

Respiratory or skin sensitization:

Hazardous components CAS-No.	Result	Test type	Species	Method
Acrylic acid 79-10-7	not sensitising	Skin painting test	guinea pig	
Methacrylic acid 79-41-4	not sensitising	Buehler test	guinea pig	Buehler test

Germ cell mutagenicity:

Hazardous components	Result	Type of study /	Metabolic	Species	Method
CAS-No.		Route of	activation /		
		administration	Exposure time		
Acrylic acid	negative	bacterial reverse	with and without		
79-10-7		mutation assay (e.g			
		Ames test)			
Cumene hydroperoxide	positive	bacterial reverse	without		OECD Guideline 471
80-15-9		mutation assay (e.g			(Bacterial Reverse Mutation
		Ames test)			Assay)
Cumene hydroperoxide	negative	dermal		mouse	
80-15-9					
2-Hydroxyethyl	negative	bacterial reverse	with and without		OECD Guideline 471
methacrylate		mutation assay (e.g			(Bacterial Reverse Mutation
868-77-9		Ames test)			Assay)
	positive	in vitro mammalian	with and without		OECD Guideline 473 (In vitro
		chromosome			Mammalian Chromosome
		aberration test			Aberration Test)

Repeated dose toxicity

Hazardous components CAS-No.	Result	Route of application	Exposure time / Frequency of treatment	Species	Method
Cumene hydroperoxide 80-15-9		inhalation: aerosol	6 h/d5 d/w	rat	

SECTION 12: Ecological information

General ecological information:

Precautions required with respect to Environmental Hazards of articles in which this product is used should be considered. The mixture is classified based on the available hazard information for the ingredients as defined in the classification criteria for mixtures for each hazard class or differentiation in Annex I to Regulation 1272/2008/EC. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.

12.1. Toxicity

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

	Hazardous components	Value	Value	Acute	Exposure	Species	Method
	CAS-No.	type	value	Toxicity Study	time	Species	Methou
ŀ	Hydroxypropyl methacrylate	LC50	493 mg/l	Fish	48 h	Leuciscus idus melanotus	DIN 38412-15
	27813-02-1		-		40.1		
ł	Hydroxypropyl methacrylate 27813-02-1	EC50	> 130 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute
							Immobilisation Test)
	Acrylic acid	LC50	27 mg/l	Fish	96 h	Salmo gairdneri (new name:	EPA OTS
	79-10-7					Oncorhynchus mykiss)	797.1400 (Fish Acute Toxicity Test)
	Acrylic acid	EC10	0,03 mg/l	Algae	72 h	Scenedesmus subspicatus (new	OECD Guideline
	79-10-7					name: Desmodesmus subspicatus)	201 (Alga, Growth Inhibition Test)
		EC50	0,13 mg/l	Algae	72 h	Scenedesmus subspicatus (new	OECD Guideline
						name: Desmodesmus subspicatus)	201 (Alga, Growth Inhibition Test)
	Acrylic acid	NOEC	19 mg/l	chronic	21 d	Daphnia magna	EPA OTS
	79-10-7			Daphnia			797.1330 (Daphnid Chronic Toxicity
							Test)
	2,2'-Ethylenedioxydiethyl dimethacrylate	LC50	16,4 mg/l	Fish	96 h		OECD Guideline 203 (Fish, Acute
	109-16-0						Toxicity Test)
	Cumene hydroperoxide 80-15-9	LC50	3,9 mg/l	Fish	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish, Acute
	80-13-9						Toxicity Test)
	Cumene hydroperoxide 80-15-9	EC50	18 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline
	80-13-9						202 (Daphnia sp. Acute
							Immobilisation
	Cumene hydroperoxide	ErC50	3,1 mg/l	Algae	72 h	Pseudokirchnerella subcapitata	Test) OECD Guideline
	80-15-9			C C			201 (Alga, Growth
	Methacrylic acid	LC50	85 mg/l	Fish	96 h	Salmo gairdneri (new name:	Inhibition Test) EPA OTS
	79-41-4		C			Oncorhynchus mykiss)	797.1400 (Fish
							Acute Toxicity Test)
	Methacrylic acid	EC50	> 130 mg/l	Daphnia	48 h	Daphnia magna	EPA OTS
	79-41-4						797.1300 (Aquatic Invertebrate Acute
							Toxicity Test,
							Freshwater Daphnids)
	Methacrylic acid	EC50	45 mg/l	Algae	72 h	Selenastrum capricornutum	OECD Guideline
	79-41-4					(new name: Pseudokirchnerella subcapitata)	201 (Alga, Growth Inhibition Test)
		NOEC	8,2 mg/l	Algae	72 h	Selenastrum capricornutum	OECD Guideline
						(new name: Pseudokirchnerella	0.0,
2	-Hydroxyethyl methacrylate	LC50	227 mg/l	Fish	96 h	subcapitata) Pimephales promelas	Inhibition Test) OECD Guideline
	868-77-9		-				203 (Fish, Acute
2	2-Hydroxyethyl methacrylate	EC50	380 mg/l	Daphnia	48 h	Daphnia magna	Toxicity Test) OECD Guideline
	868-77-9		0				202 (Daphnia sp.
							Acute Immobilisation
		NORG	1.00 4		70 1		Test)
2	P-Hydroxyethyl methacrylate 868-77-9	NOEC	160 mg/l	Algae	72 h	Selenastrum capricornutum (new name: Pseudokirchnerella	OECD Guideline 201 (Alga, Growth
	/ /					subcapitata)	Inhibition Test)
		EC50	345 mg/l	Algae	72 h	Selenastrum capricornutum (new name: Pseudokirchnerella	OECD Guideline 201 (Alga, Growth
						subcapitata)	Inhibition Test)
2	P-Hydroxyethyl methacrylate 868-77-9	NOEC	24,1 mg/l	chronic Daphnia	21 d	Daphnia magna	OECD 211 (Daphnia magna,
	000 11 2			Dapinna	1	1	, Pupinina magna,

12.2. Persistence and degradability

Persistence and Biodegradability:

The product is not biodegradable.

Hazardous components CAS-No.	Result	Route of application	Degradability	Method
Hydroxypropyl methacrylate 27813-02-1	readily biodegradable	aerobic	94,2 %	OECD Guideline 301 E (Ready biodegradability: Modified OECD Screening Test)
Acrylic acid 79-10-7	readily biodegradable	aerobic	81 %	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	readily biodegradable		85 %	OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)
Cumene hydroperoxide 80-15-9		no data	0 %	OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)
Methacrylic acid 79-41-4	readily biodegradable	aerobic	86 %	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle 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 for the product.

Hazardous components CAS-No.	LogKow	Bioconcentration factor (BCF)	Exposure time	Species	Temperature	Method
Hydroxypropyl methacrylate 27813-02-1	0,97					
Acrylic acid 79-10-7 Acrylic acid 79-10-7	0,46	3,16			25 °C	OECD Guideline 107 (Partition Coefficient (n- octanol / water), Shake Flask Method)
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	1,88					
Cumene hydroperoxide 80-15-9 Cumene hydroperoxide 80-15-9	2,16	9,1		calculation		OECD Guideline 305 (Bioconcentration: Flow- through Fish Test)
Methacrylic acid 79-41-4	0,93				22 °C	OECD Guideline 107 (Partition Coefficient (n- octanol / water), Shake Flask Method)
Acetic acid, 2- phenylhydrazide 114-83-0	0,74					

12.5. Results of PBT and vPvB assessment

Hazardous components	PBT/vPvB
CAS-No.	

Hydroxypropyl methacrylate	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
27813-02-1	Bioaccumulative (vPvB) criteria.
Acrylic acid	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
79-10-7	Bioaccumulative (vPvB) criteria.
2,2'-Ethylenedioxydiethyl dimethacrylate	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
109-16-0	Bioaccumulative (vPvB) criteria.
Methacrylic acid	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
79-41-4	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

Product disposal:

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

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Disposal of uncleaned packages:

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

Disposal must be made according to official regulations.

Waste code

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

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

	SECTION 14: Transport information
14.1.	UN number
	Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.
14.2.	UN proper shipping name
	Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.
14.3.	Transport hazard class(es)
	Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.
14.4.	Packaging 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 73/78 and the IBC Code
	not applicable

SECTION 15: Regulatory information

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

VOC content (2010/75/EC) < 5 %

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:

H226 Flammable liquid and vapor.

H242 Heating may cause a fire.

H301 Toxic if swallowed.

H302 Harmful if swallowed. H311 Toxic in contact with skin.

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.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

H351 Suspected of causing cancer.

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

H400 Very toxic to aquatic life.

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.

Label elements (DPD):

Xi - Irritant



Risk phrases:

R37/38 Irritating to respiratory system and skin.

R41 Risk of serious damage to eyes.

R43 May cause sensitisation by skin contact.

Safety phrases:

S24/25 Avoid contact with skin and eyes.

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

S28 After contact with skin, wash immediately with plenty of water and soap.

S37/39 Wear suitable gloves and eye/face protection.

S51 Use only in well-ventilated areas.

Additional labeling:

For consumer use only: S2 Keep out of the reach of children.

S46 If swallowed, seek medical advice immediately and show this container or label.

Contains:

Hydroxypropyl methacrylate, 2,2'-Ethylenedioxydiethyl dimethacrylate

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.