

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

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LOCTITE 518 known as 518(TM) Flange Sealant Gasket

SDS No. : 153476 V004.1 Revision: 04.11.2015 printing date: 25.05.2016 Replaces version from: 28.10.2015

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

# 1.1. Product identifier

LOCTITE 518 known as 518(TM) Flange Sealant Gasket

# **Contains:**

Acrylic acid Cumene hydroperoxide

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

Anaerobic 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):	
Serious eye irritation	Category 2
H319 Causes serious eye irritation.	
Skin irritation	Category 2
H315 Causes skin 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 3
H412 Harmful to aquatic life with long lasting effects.	

2.2. Label elements

Label elements (CLP):

Hazard pictogram:	
Signal word:	Warning
Hazard statement:	<ul><li>H315 Causes skin irritation.</li><li>H319 Causes serious eye irritation.</li><li>H335 May cause respiratory irritation.</li><li>H412 Harmful to aquatic life with long lasting effects.</li></ul>
Supplemental information	Contains 2-Hydroxyethyl methacrylate; Acetic acid, 2-phenylhydrazide. May produce an allergic reaction.
Precautionary statement:	***For consumer use only: P101 If medical advice is needed, have product container or label at hand. P102 Keep out of reach of children. P501 Dispose of waste and residues in accordance with local authority requirements***
Precautionary statement: Prevention	P261 Avoid breathing vapours. P273 Avoid release to the environment.
Precautionary statement: Response	P302+P352 IF ON SKIN: Wash with plenty of water. P337+P313 If eye irritation persists: Get medical advice/attention.

# 2.3. Other hazards

Non corrosive to eyes according to test method OECD 438 or based on analogy to similar products tested. 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

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

Hazardous components CAS-No.	EC Number REACH-Reg No.	content	Classification
Acrylic acid 79-10-7	201-177-9 01-2119452449-31	1- < 5 %	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
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
Ethane-1,2-diol 107-21-1	203-473-3 01-2119456816-28	1-< 5%	Acute Tox. 4; Oral H302 STOT RE 2; Oral H373
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 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** RESPIRATORY: Irritation, coughing, shortness of breath, chest tightness.

EYE: Irritation, conjunctivitis.

SKIN: Redness, inflammation.

**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

Do not expose to direct heat. **5.3. Advice for firefighters** 

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

# **SECTION 6: Accidental release measures**

**6.1. Personal precautions, protective equipment and emergency procedures** Avoid skin and eye contact. Ensure adequate ventilation.

See advice in section 8

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. 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°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)** Anaerobic Adhesive

MSDS-No.: 153476

V004.1

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

# 8.1. Control parameters

# **Occupational Exposure Limits**

# Valid for

Great Britain

Ingredient [Regulated substance]	ppm	mg/m <sup>3</sup>	Value type	Short term exposure limit category / Remarks	Regulatory list	
Silicon dioxide 112945-52-5 [SILICA, AMORPHOUS, INHALABLE DUST]		6	Time Weighted Average (TWA):		EH40 WEL	
Silicon dioxide 112945-52-5 [SILICA, AMORPHOUS, RESPIRABLE DUST]		2,4	Time Weighted Average (TWA):		EH40 WEL	
Ethane-1,2-diol 107-21-1 [ETHANE-1,2-DIOL, VAPOUR]	40	104	Short Term Exposure Limit (STEL):		EH40 WEL	
Ethane-1,2-diol 107-21-1 [ETHANE-1,2-DIOL, PARTICULATE]			Skin designation:	Can be absorbed through the skin.	EH40 WEL	
Ethane-1,2-diol 107-21-1 [ETHANE-1,2-DIOL, VAPOUR]			Skin designation:	Can be absorbed through the skin.	EH40 WEL	
Ethane-1,2-diol 107-21-1 [ETHANE-1,2-DIOL, PARTICULATE]		10	Time Weighted Average (TWA):		EH40 WEL	
Ethane-1,2-diol 107-21-1 [ETHANE-1,2-DIOL, VAPOUR]	20	52	Time Weighted Average (TWA):		EH40 WEL	
Ethane-1,2-diol 107-21-1 [ETHYLENE GLYCOL]	20	52	Time Weighted Average (TWA):	Indicative	ECTLV	
Ethane-1,2-diol 107-21-1 [ETHYLENE GLYCOL]	40	104	Short Term Exposure Limit (STEL):	Indicative	ECTLV	
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	

# **Occupational Exposure Limits**

Valid for

Ireland

Ingredient [Regulated substance]	ppm	mg/m <sup>3</sup>	Value type	Short term exposure limit category / Remarks	Regulatory list
Silicon dioxide 112945-52-5 [SILICA, AMORPHOUS, TOTAL INHALABLE DUST]		6	Time Weighted Average (TWA):		IR_OEL
Silicon dioxide 112945-52-5 [SILICA, AMORPHOUS, RESPIRABLE DUST]		2,4	Time Weighted Average (TWA):		IR_OEL
Acrylic acid 79-10-7	2	6	Time Weighted Average (TWA):		IR_OEL

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[ACRYLIC ACID]					
Ethane-1,2-diol 107-21-1 [ETHANE-1,2-DIOL, VAPOUR]	40	104	Short Term Exposure Limit (STEL):	Indicative OELV	IR_OEL
Ethane-1,2-diol 107-21-1 [ETHANE-1,2-DIOL, VAPOUR]	20	52	Time Weighted Average (TWA):	Indicative OELV	IR_OEL
Ethane-1,2-diol 107-21-1 [ETHANE-1,2-DIOL, PARTICULATE]		10	Time Weighted Average (TWA):	Indicative OELV	IR_OEL
Ethane-1,2-diol 107-21-1 [ETHANE-1,2-DIOL, PARTICULATE]			Skin designation:	Can be absorbed through the skin.	IR_OEL
Ethane-1,2-diol 107-21-1 [ETHANE-1,2-DIOL, VAPOUR]			Skin designation:	Can be absorbed through the skin.	IR_OEL
Ethane-1,2-diol 107-21-1 [ETHYLENE GLYCOL]	20	52	Time Weighted Average (TWA):	Indicative	ECTLV
Ethane-1,2-diol 107-21-1 [ETHYLENE GLYCOL]	40	104	Short Term Exposure Limit (STEL):	Indicative	ECTLV
Cumene 98-82-8 [ISOPROPYL BENZENE]	20	100	Time Weighted Average (TWA):	Indicative OELV	IR_OEL
Cumene 98-82-8 [ISOPROPYL BENZENE]	50	250	Short Term Exposure Limit (STEL):	Indicative OELV	IR_OEL
Cumene 98-82-8 [ISOPROPYL BENZENE]			Skin designation:	Can be absorbed through the skin.	IR_OEL
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
		F	mg/l	ppm	mg/kg	others	
Acrylic acid 79-10-7	aqua (freshwater)		8		0	0,003 mg/L	
Acrylic acid 79-10-7	aqua (marine water)					0,0003 mg/L	
Acrylic acid	aqua					0,0013 mg/L	
79-10-7	(intermittent releases)					0,0015 mg/E	
Acrylic acid 79-10-7	STP					0,9 mg/L	
Acrylic acid 79-10-7	sediment (freshwater)				0,0236 mg/kg		
Acrylic acid 79-10-7	sediment (marine water)				0,00236 mg/kg		
Acrylic acid 79-10-7	soil				1 mg/kg		
Acrylic acid 79-10-7	oral				0,0023 mg/kg		
Acrylic acid 79-10-7	Predator				0,03 g/kg		
Ethane-1,2-diol 107-21-1	aqua (freshwater)					10 mg/L	
Ethane-1,2-diol 107-21-1	aqua (marine water)					1 mg/L	
Ethane-1,2-diol 107-21-1	sediment (freshwater)				20,9 mg/kg		
Ethane-1,2-diol 107-21-1	STP					199,5 mg/L	
Ethane-1,2-diol 107-21-1	aqua (intermittent releases)					10 mg/L	
Ethane-1,2-diol 107-21-1	soil				1,53 mg/kg		
2-Hydroxyethyl methacrylate 868-77-9	aqua (freshwater)					0,482 mg/L	
2-Hydroxyethyl methacrylate 868-77-9	aqua (marine water)					0,482 mg/L	
2-Hydroxyethyl methacrylate 868-77-9	STP					10 mg/L	
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		

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

Name on list	Application Area	ion Route of Exposure Time		Value	Remarks	
Acrylic acid 79-10-7	Workers	Inhalation	Long term exposure - local effects	exposure - local		
Acrylic acid 79-10-7	Workers	Inhalation	Acute/short term exposure - local effects		30 mg/m3	
Acrylic acid 79-10-7	Workers	Dermal	Acute/short term exposure - local effects		1 mg/cm2	
Acrylic acid 79-10-7	general population	Dermal	Acute/short term exposure - local effects		1 mg/cm2	
Acrylic acid 79-10-7	general population	inhalation	Acute/short term exposure - local effects		3,6 mg/m3	
Acrylic acid 79-10-7	general population	inhalation	Long term exposure - local effects		3,6 mg/m3	
Ethane-1,2-diol 107-21-1	Workers	Dermal	Long term exposure - systemic effects		106 mg/kg bw/day	
Ethane-1,2-diol 107-21-1	Workers	Inhalation	Long term exposure - local effects		35 mg/m3	
Ethane-1,2-diol 107-21-1	general population	Dermal	Long term exposure - systemic effects		53 mg/kg bw/day	
Ethane-1,2-diol 107-21-1	general population	Inhalation	Long term exposure - local effects		7 mg/m3	
2-Hydroxyethyl methacrylate 868-77-9	Workers	Dermal	Long term exposure - systemic effects		1,3 mg/kg bw/day	
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 bw/day	
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 bw/day	

# 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)

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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;  $\geq 0.4$  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	gel red
Odor	mild
Odour threshold	No data available / Not applicable
рН	Not applicable
Initial boiling point	> 150 °C (> 302 °F)
Flash point	> 100,00 °C ( $> 212$ °F); Tagliabue closed cup
Decomposition temperature	No data available / Not applicable
Vapour pressure	< 10 mm hg
(27 °C (80.6 °F))	
Vapour pressure	< 300 mbar
(50 °C (122 °F))	
Density	1,1 g/cm3
(80 °F (26.7 °C))	
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)	Slight
(Solvent: Water)	
Solidification temperature	No data available / Not applicable
Melting point	No data available / Not applicable
Flammability	No data available / Not applicable
Auto-ignition temperature	No data available / Not applicable
Explosive limits	No data available / Not applicable
Partition coefficient: n-octanol/water	No data available / Not applicable
Evaporation rate	No data available / Not applicable
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 oxidants. Reaction with strong acids. Reducing agents.

### **10.2.** Chemical stability

Stable under recommended storage conditions.

# 10.3. Possibility of hazardous reactions

See section reactivity

# 10.4. Conditions to avoid

No decomposition if used according to specifications.

# **10.5. Incompatible materials**

See section reactivity

# 10.6. Hazardous decomposition products

carbon oxides. Sulphur oxides nitrogen oxides Irritating organic vapours.

# **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:

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 irritation. Non corrosive to eyes according to test method OECD 438 or based on analogy to similar products tested.

# Sensitizing:

May produce an allergic reaction.

# Acute oral toxicity:

Hazardous components	Value	Value	Route of	Exposure	Species	Method
CAS-No.	type		application	time		
Acrylic acid	LD50	1.500 mg/kg	oral		rat	BASF Test
79-10-7						
Cumene hydroperoxide	LD50	550 mg/kg	oral		rat	
80-15-9						
Ethane-1,2-diol	Acute	500 mg/kg	oral			Expert judgement
107-21-1	toxicity					1 0 0
	estimate					
	(ATE)					
Ethane-1,2-diol	LD50	> 2.000 mg/kg			rat	EU Method B.1 (Acute
107-21-1						Toxicity (Oral))

# Acute inhalative toxicity:

Hazardous components	Value	Value	Route of	Exposure	Species	Method
CAS-No.	type		application	time		
Acrylic acid	LC50	> 5,1 mg/l	Vapor.	4 h	rat	OECD Guideline 403 (Acute
79-10-7						Inhalation Toxicity)
Acrylic acid	Acute	11 mg/l	vapour			Expert judgement
79-10-7	toxicity	-	-			
	estimate					
	(ATE)					

# Acute dermal toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Acrylic acid	Acute	1.100 mg/kg	dermal			Expert judgement
79-10-7	toxicity					
	estimate					
	(ATE)					
Acrylic acid	LD50	> 2.000 mg/kg			rabbit	OECD Guideline 402 (Acute
79-10-7						Dermal Toxicity)
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

# Serious eye damage/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
Acrylic acid 79-10-7	corrosive	21 d	rabbit	BASF Test

# 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	
Ethane-1,2-diol 107-21-1	not sensitising	Guinea pig maximisat ion test	guinea pig	OECD Guideline 406 (Skin Sensitisation)

# Germ cell mutagenicity:

Hazardous components CAS-No.	Result	Type of study / Route of administration	Metabolic activation / Exposure time	Species	Method
Acrylic acid 79-10-7	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		
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	
Ethane-1,2-diol 107-21-1	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		
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)

# **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:

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 CAS-No.	Value type	Value	Acute Toxicity Study	Exposure time	Species	Method
Acrylic acid 79-10-7	LC50	27 mg/l	Fish	96 h	Salmo gairdneri (new name: Oncorhynchus mykiss)	EPA OTS 797.1400 (Fish Acute Toxicity Test)
Acrylic acid 79-10-7	EC10	0,03 mg/l	Algae	72 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	OECD Guideline 201 (Alga, Growth Inhibition Test)
	EC50	0,13 mg/l	Algae	72 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	OECD Guideline 201 (Alga, Growth Inhibition Test)
Acrylic acid 79-10-7	EC10	41 mg/l	Bacteria	16 h	subspicatus)	minoruon rest)
Acrylic acid 79-10-7	NOEC	19 mg/l	chronic Daphnia	21 d	Daphnia magna	EPA OTS 797.1330 (Daphnid Chronic Toxicity
Cumene hydroperoxide 80-15-9	LC50	3,9 mg/l	Fish	96 h	Oncorhynchus mykiss	Test) OECD Guideline 203 (Fish, Acute
Cumene hydroperoxide 80-15-9	EC50	18 mg/l	Daphnia	48 h	Daphnia magna	Toxicity Test) OECD Guideline 202 (Daphnia sp. Acute
						Immobilisation Test)
Cumene hydroperoxide 80-15-9	ErC50	3,1 mg/l	Algae	72 h	Pseudokirchnerella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
Cumene hydroperoxide 80-15-9	EC10	70 mg/l	Bacteria	30 min		minoruon rest)
Ethane-1,2-diol 107-21-1	NOEC	15.380 mg/l	Fish	28 d	Oryzias latipes	OECD Guideline 204 (Fish, Prolonged Toxicity
	LC50	72.860 mg/l	Fish	96 h	Pimephales promelas	Test: 14-day Study) OECD Guideline 203 (Fish, Acute
Ethane-1,2-diol 107-21-1	EC50	34.400 mg/l	Daphnia	48 h	Ceriodaphnia sp.	Toxicity Test) OECD Guideline 202 (Daphnia sp. Acute
						Immobilisation
Ethane-1,2-diol 107-21-1	EC50	> 20.000 mg/l	Algae		Microcystis aeruginosa	Test) OECD Guideline 201 (Alga, Growth Inhibition Test)
Ethane-1,2-diol 107-21-1	EC0	> 10.000 mg/l	Bacteria	16 h		minorition rest)
Ethane-1,2-diol 107-21-1	NOEC	8.590 mg/l	chronic Daphnia	7 d	Ceriodaphnia sp.	OECD 211 (Daphnia magna, Reproduction Test)
2-Hydroxyethyl methacrylate 868-77-9	LC50	227 mg/l	Fish	96 h	Pimephales promelas	OECD Guideline 203 (Fish, Acute Toxicity Test)
2-Hydroxyethyl methacrylate 868-77-9	EC50	380 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation
2-Hydroxyethyl methacrylate 868-77-9	EC50	345 mg/l	Algae	72 h	Selenastrum capricornutum (new name: Pseudokirchnerella	
	NOEC	160 mg/l	Algae	72 h	subcapitata) Selenastrum capricornutum (new name: Pseudokirchnerella subcapitata)	Inhibition Test) OECD Guideline 201 (Alga, Growth Inhibition Test)
2-Hydroxyethyl methacrylate	EC0	> 3.000 mg/l	Bacteria	16 h	subcapitata)	minoruon rest)
868-77-9 2-Hydroxyethyl methacrylate 868-77-9	NOEC	24,1 mg/l	chronic Daphnia	21 d	Daphnia magna	OECD 211 (Daphnia magna, Reproduction Test)

# 12.2. Persistence and degradability

# Persistence and Biodegradability:

The product is not biodegradable.

Hazardous components CAS-No.	Result	Route of application	Degradability	Method
Acrylic acid 79-10-7	readily biodegradable	aerobic	81 %	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)
	inherently biodegradable	aerobic	100 %	OECD Guideline 302 B (Inherent biodegradability: Zahn- Wellens/EMPA Test)
Cumene hydroperoxide 80-15-9		no data	0 %	OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)
Ethane-1,2-diol 107-21-1	readily biodegradable	aerobic	83 - 96 %	OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I))
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 CAS-No.	LogKow	Bioconcentration factor (BCF)	Exposure time	Species	Temperature	Method
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)
Cumene hydroperoxide 80-15-9 Cumene hydroperoxide	2,16	9,1		calculation		OECD Guideline 305 (Bioconcentration: Flow- through Fish Test)
80-15-9 Ethane-1,2-diol 107-21-1	-1,36					
Acetic acid, 2- phenylhydrazide 114-83-0	0,74					

# 12.5. Results of PBT and vPvB assessment

Hazardous components	PBT/vPvB
CAS-No.	
Acrylic acid	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
79-10-7	Bioaccumulative (vPvB) criteria.
Ethane-1,2-diol	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
107-21-1	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:

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

# **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 <5 %

(2010/75/EC)

15.2. Chemical safety assessment

A chemical safety assessment has not been carried out.

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# **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.
- 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:

R36/37/38 Irritating to eyes, respiratory system and skin.

Safety phrases:

- S23 Do not breathe vapour.
- 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.
- 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 2-Hydroxyethyl methacrylate, Acetic acid, 2-phenylhydrazide. May produce an allergic reaction.

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