

LOCTITE 315

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

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SDS No.: 153573

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

1.1. Product identifier

LOCTITE 315

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

Adhesives

Wood Lane End

HP24RQ Hemel Hempstead

Great Britain

Phone: +44 (1442) 278000

Fax-no.: +44 (1442) 278071

ua-productsafety.uk@henkel.com

For Safety Data Sheet updates please visit our website https://mysds.henkel.com/index.html#/appSelection or www.henkel-adhesives.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.

Toxic to reproduction Category 1B

H360D May damage the unborn child.

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:



Contains Tetrahy drofurfury l methacry late

> Hydroxy propyl methacry late Cumene hydroperoxide

1-Methyltrimethylene dimethacrylate

methyl methacry late

Signal word: Danger

Hazard statement: H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation. H335 May cause respiratory irritation. H360D May damage the unborn child.

H412 Harmful to aquatic life with long lasting effects.

Supplemental information Restricted to professional users.

Precautionary statement: P201 Obtain special instructions before use.

Prevention P261 Avoid breathing vapors.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary statement: P308+P313 IF exposed or concerned: Get medical advice/attention. Response

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

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.

Following substances are present in a concentration >= 0,1% and fulfill the criteria for PBT/vPvB, or were identified as endocrine disruptor (ED):

This mixture does not contain any substances in concentration ≥ the concentration limit that are assessed to be a PBT, vPvB or ED.

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.	Concentration	Classification	Specific Conc. Limits, M- factors and ATEs	Add. Information
Tetrahydrofurfuryl methacrylate 2455-24-5 219-529-5 01-2120748481-53	10- 20 %	Skin Sens. 1, H317 Repr. 1B, H360D Aquatic Chronic 3, H412		
Hydroxypropyl methacrylate 27813-02-1 248-666-3 01-2119490226-37	5- < 10 %	Skin Sens. 1, H317 Eye Irrit. 2, H319		
Cumene hydroperoxide 80-15-9 201-254-7 01-2119475796-19	1- < 3 %	STOT RE 2, H373 Skin Corr. 1B, H314 Acute Tox. 2, Inhalation, H330 Aquatic Chronic 2, H411 Acute Tox. 4, Oral, H302 Acute Tox. 4, Dermal, H312 Org. Perox. E, H242 STOT SE 3, H335	Skin Irrit. 2; H315; C3 - < 10 % Eye Dam. 1; H318; C3 - < 10 % Eye Irrit. 2; H319; C1 - < 3 % Skin Corr. 1B; H314; C>= 10 % STOT SE 3; H335; C>= 1 % ===== dermal:ATE = 1.100 mg/kg	
1-Methyltrimethylene dimethacrylate 1189-08-8 214-711-0 01-2119969461-31	0,1-< 1 %	Skin Sens. 1B, H317		
methyl methacrylate 80-62-6 201-297-1 01-2119452498-28	0,1-< 1 %	Flam. Liq. 2, H225 STOT SE 3, H335 Skin Irrit. 2, H315 Skin Sens. 1, H317	STOT SE 3; H335; C >= 10 %	EU OEL
methacrylic acid 79-41-4 201-204-4 01-2119463884-26	0,1-< 1 %	Acute Tox. 4, Oral, H302 Acute Tox. 3, Dermal, H311 Acute Tox. 4, Inhalation, H332 Skin Corr. 1A, H314 Eye Dam. 1, H318 STOT SE 3, H335	STOT SE 3; H335; C >= 1 % ===== dermal:ATE = 500 mg/kg inhalation:ATE = 3,61 mg/l;	

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.

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

SKIN: Rash, Urticaria.

RESPIRATORY: Irritation, coughing, shortness of breath, chest tightness.

EYE: Irritation, conjunctivitis.

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:

water, carbon dioxide, foam, powder

Extinguishing media which must not be used for safety reasons:

High pressure waterjet

5.2. Special hazards arising from the substance or mixture

In the event of a fire, carbon monoxide (CO), carbon dioxide (CO2) and nitrogen oxides (NOx) can be released.

5.3. Advice for firefighters

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

Additional information:

In case of fire, keep containers cool with water spray.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid contact with skin and eyes.

Wear protective equipment.

Ensure adequate ventilation.

Keep away from sources of ignition.

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

Dispose of contaminated material as waste according to Section 13.

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

Avoid skin and eye contact.

See advice in section 8

Hy giene measures:

Good industrial hygiene practices should be observed.

Do not eat, drink or smoke while working.

Wash hands before work breaks and after finishing work.

7.2. Conditions for safe storage, including any incompatibilities

Ensure good ventilation/extraction.

Refer to Technical Data Sheet

7.3. Specific enduse(s)

Anaerobic 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
Aluminium hydroxide 21645-51-2 [DUST, RESPIRABLE DUST]		4	Time Weighted Average (TWA):		EH40 WEL
Aluminium hydroxide 21645-51-2 [DUST, INHALABLE DUST]		10	Time Weighted Average (TWA):		EH40 WEL
Methyl methacrylate 80-62-6 [METHYL METHACRYLATE]	50	208	Time Weighted Average (TWA):		EH40 WEL
Methyl methacrylate 80-62-6 [METHYL METHACRYLATE]	100		Short Term Exposure Limit (STEL):	Indicative	ECTLV
Methyl methacrylate 80-62-6 [METHYL METHACRYLATE]	50		Time Weighted Average (TWA):	Indicative	ECTLV
Methyl methacrylate 80-62-6 [METHYL METHACRYLATE]	100	416	Short Term Exposure Limit (STEL):	15 minutes	EH40 WEL
Methacrylic acid 79-41-4 [METHACRYLIC ACID]	20	72	Time Weighted Average (TWA):		EH40 WEL
Methacrylic acid 79-41-4 [METHACRYLIC ACID]	40	143	Short Term Exposure Limit (STEL):	15 minutes	EH40 WEL

Occupational Exposure Limits

Valid for

Ireland

In gre dient [Regulated substance]	ppm	mg/m ³	Value type	Short term exposure limit category/Remarks	Regulatorylist
Aluminium hydroxide 21645-51-2 [DUST S NON-SPECIFIC]		4	Time Weighted Average (TWA):		IR_OEL
Aluminium hydroxide 21645-51-2 [DUSTSNON-SPECIFIC]		10	Time Weighted Average (TWA):		IR_OEL
Methyl methacrylate 80-62-6 [METHYL METHACRYLATE]	50		Time Weighted Average (TWA):	Indicative OELV	IR_OEL
Methyl methacrylate 80-62-6 [MET HYL METHACRYLATE]	100		Short Term Exposure Limit (STEL):	Indicative	ECTLV
Methyl methacrylate 80-62-6 [METHYL METHACRYLATE]	50		Time Weighted Average (TWA):	Indicative	ECTLV
Methyl methacrylate 80-62-6 [METHYL METHACRYLATE]	100		Short Term Exposure Limit (STEL):	15 minutes Indicative OELV	IR_OEL
Methacrylic acid 79-41-4 [METHACRYLIC ACID]	20	70	Time Weighted Average (TWA):		IR_OEL
Methacrylic acid 79-41-4 [METHACRYLIC ACID]	40	140	Short Term Exposure Limit (STEL):	15 minutes	IR_OEL

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

Name on list	Environmental Compartment		Value				Remarks
			mg/l	ppm	mg/kg	others	
Tetrahydrofurfuryl methacrylate 2455-24-5	aqua (freshwater)		0,347 mg/l				
Tetrahydrofurfuryl methacrylate 2455-24-5	aqua (marine water)		0,035 mg/l				
Tetrahydrofurfuryl methacrylate 2455-24-5	sewage treatment plant (STP)		15,8 mg/l				
Tetrahydrofurfuryl methacrylate 2455-24-5	sediment (freshwater)				2,12 mg/kg		
Tetrahydrofurfuryl methacrylate 2455-24-5	sediment (marine water)				0,212 mg/kg		
Tetrahydrofurfuryl methacrylate 2455-24-5	aqua (intermittent releases)		0,347 mg/l				
Tetrahydrofurfuryl methacrylate 2455-24-5	Soil				0,221 mg/kg		
Methacrylic acid, monoester with propane- 1,2-diol	aqua (freshwater)		0,904 mg/l				
27813-02-1			0.004/				
Methacrylic acid, monoester with propane- 1,2-diol 27813-02-1	aqua (marine water)		0,904 mg/l				
Methacrylic acid, monoester with propane- 1,2-diol	sewage treatment plant		10 mg/l				
27813-02-1	(STP)						
Methacrylic acid, monoester with propane- 1,2-diol 27813-02-1	aqua (intermittent releases)		0,972 mg/l				
Methacrylic acid, monoester with propane- 1,2-diol 27813-02-1	sediment (freshwater)				6,28 mg/kg		
Methacrylic acid, monoester with propane- 1,2-diol 27813-02-1	sediment (marine water)				6,28 mg/kg		
Methacrylic acid, monoester with propane- 1,2-diol 27813-02-1	Soil				0,727 mg/kg		
Methacrylic acid, monoester with propane- 1,2-diol 27813-02-1	Marine water - intermittent		0,972 mg/l				
Methacrylic acid, monoester with propane- 1,2-diol 27813-02-1	Air						no hazard identified
Methacrylic acid, monoester with propane- 1,2-diol 27813-02-1	Predator						no potential for bioaccumulation
.alpha.,.alphaDimethylbenzyl hydroperoxide 80-15-9	aqua (freshwater)		0,0031 mg/l				
.alpha.,.alphaDimethylbenzyl hydroperoxide 80-15-9	aqua (marine water)		0,00031 mg/l				
.alpha.,.alphaDimethylbenzyl hydroperoxide 80-15-9	aqua (intermittent releases)		0,031 mg/l				
alpha., alpha. Dimethylbenzyl hydroperoxide 80-15-9	Sewage treatment plant		0,35 mg/l				
.alpha.,.alphaDimethylbenzyl hydroperoxide 80-15-9	sediment (freshwater)				0,023 mg/kg		
.alpha.,.alphaDimethylbenzyl hydroperoxide 80-15-9	sediment (marine water)				0,0023 mg/kg		
.alpha.,.alphaDimethylbenzyl hydroperoxide 80-15-9	Soil				0,0029 mg/kg		
methyl methacrylate 80-62-6 methyl methacrylate	aqua (freshwater) aqua (marine		0,94 mg/l 0,94 mg/l				
meen yr memaer yrate	aqua (maime	<u> </u>	0,24 mg/1	l			

80-62-6	water)			
methyl methacrylate 80-62-6	aqua (intermittent releases)	0,94 mg/l		
methyl methacrylate 80-62-6	sewage treatment plant (STP)	10 mg/l		
methyl methacrylate 80-62-6	sediment (freshwater)		5,74 mg/kg	
methyl methacrylate 80-62-6	Soil		1,47 mg/kg	
methacrylic acid 79-41-4	aqua (freshwater)	0,82 mg/l		
methacrylic acid 79-41-4	aqua (marine water)	0,82 mg/l		
methacrylic acid 79-41-4	sewage treatment plant (STP)	10 mg/l		
methacrylic acid 79-41-4	aqua (intermittent releases)	0,82 mg/l		
methacrylic acid 79-41-4	Soil		1,2 mg/kg	

Derived No-Effect Level (DNEL):

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
Tetrahydrofurfuryl methacrylate 2455-24-5	Workers	inhalation	Long term exposure - systemic effects		3,53 mg/m3	
Tetrahydrofurfuryl methacrylate 2455-24-5	Workers	dermal	Long term exposure - systemic effects		1 mg/kg	
Tetrahydrofurfuryl methacrylate 2455-24-5	General population	inhalation	Long term exposure - systemic effects		0,87 mg/m3	
Tetrahydrofurfuryl methacrylate 2455-24-5	General population	dermal	Long term exposure - systemic effects		0,5 mg/kg	
Tetrahydrofurfuryl methacrylate 2455-24-5	General population	oral	Long term exposure - systemic effects		0,5 mg/kg	
Methacrylic acid, monoester with propane- 1,2-diol 27813-02-1	Workers	dermal	Long term exposure - systemic effects		4,2 mg/kg	no hazard identified
Methacrylic acid, monoester with propane- 1,2-diol 27813-02-1	Workers	Inhalation	Long term exposure - systemic effects		14,7 mg/m3	no hazard identified
Methacrylic acid, monoester with propane- 1,2-diol 27813-02-1	General population	dermal	Long term exposure - systemic effects		2,5 mg/kg	no hazard identified
Methacrylic acid, monoester with propane- 1,2-diol 27813-02-1	General population	Inhalation	Long term exposure - systemic effects		8,8 mg/m3	no hazard identified
Methacrylic acid, monoester with propane- 1,2-diol 27813-02-1	General population	oral	Long term exposure - systemic effects		2,5 mg/kg	no hazard identified
.alpha.,.alphaDimethylbenzyl hydroperoxide 80-15-9	Workers	inhalation	Long term exposure - systemic effects		6 mg/m3	
1-Methyltrimethylene dimethacrylate 1189-08-8	Workers	inhalation	Long term exposure - systemic effects		14,5 mg/m3	
1-Methyltrimethylene dimethacrylate 1189-08-8	Workers	dermal	Long term exposure - systemic effects		4,2 mg/kg	
1-Methyltrimethylene dimethacrylate 1189-08-8	General population	oral	Long term exposure - systemic effects		2,5 mg/kg	
1-Methyltrimethylene dimethacrylate 1189-08-8	General population	dermal	Long term exposure - systemic effects		2,5 mg/kg	
1-Methyltrimethylene dimethacrylate 1189-08-8	General population	inhalation	Long term exposure - systemic effects		4,3 mg/m3	
methyl methacrylate 80-62-6	Workers	dermal	Acute/short term exposure - local effects		1,5 mg/cm2	
methyl methacrylate 80-62-6	Workers	dermal	Long term exposure - systemic effects		13,67 mg/kg	
methyl methacrylate 80-62-6	Workers	Inhalation	Long term exposure - systemic effects		208 mg/m3	
methyl methacrylate 80-62-6	Workers	dermal	Long term exposure - local effects		1,5 mg/cm2	
methyl methacrylate 80-62-6	Workers	Inhalation	Long term exposure - local effects		208 mg/m3	
methyl methacrylate 80-62-6	General population	dermal	Acute/short term exposure - local effects		1,5 mg/cm2	
methyl methacrylate 80-62-6	General population	dermal	Long term exposure - systemic effects		8,2 mg/kg	
methyl methacrylate 80-62-6	General population	Inhalation	Long term exposure -		74,3 mg/m3	

			systemic effects		
methyl methacrylate	General	dermal	Longterm	1,5 mg/cm2	
80-62-6	population		exposure - local effects		
methyl methacrylate 80-62-6	General population	Inhalation	Long term exposure - local effects	104 mg/m3	
methacrylicacid 79-41-4	Workers	Inhalation	Long term exposure - local effects	88 mg/m3	
methacrylic acid 79-41-4	Workers	Inhalation	Long term exposure - systemic effects	29,6 mg/m3	
methacrylic acid 79-41-4	Workers	dermal	Long term exposure - systemic effects	4,25 mg/kg	
methacrylic acid 79-41-4	General population	Inhalation	Long term exposure - local effects	6,55 mg/m3	
methacrylic acid 79-41-4	General population	Inhalation	Long term exposure - systemic effects	6,3 mg/m3	
methacrylic acid 79-41-4	General population	dermal	Long term exposure - systemic effects	2,55 mg/kg	

Biological Exposure Indices:

None

8.2. Exposure controls:

Engineering controls:

Ensure good ventilation/extraction.

Respiratory protection:

Ensure adequate ventilation.

An approved mask or respirator fitted with an organic vapour cartridge should be worn if the product is used in a poorly ventilated area

Filter type: A (EN 14387)

Hand protection:

Chemical-resistant protective gloves (EN 374).

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

nitrile rubber (NBR; >= 0.4 mm thickness)

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

nitrile rubber (NBR; >= 0.4 mm thickness)

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

Eye protection:

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

Skin protection:

Wear suitable protective clothing.

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

Advices to personal protection equipment:

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

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state liquid
Delivery form blue

Colour

Odor mild

Initial boiling point > 150 °C (> 302 °F)

Flash point > 93,3 °C (> 199.94 °F); Tagliabue closed cup

pH Not determined

Solubility (qualitative) Slight

(Solvent: Water)

Solubility (qualitative) Partially soluble

(Solvent: Acetone)

Vapour pressure < 6,5 mbar

(20 °C (68 °F))

Density 1,6 - 1,7 g/cm3 None

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9.2. Other information

Other information not applicable for this product

SECTION 10: Stability and reactivity

10.1. Reactivity

Reacts with strong oxidants.

Acids.

Reducing agents.

Strong bases.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

See section reactivity

10.4. Conditions to avoid

Stable under normal conditions of storage and use.

10.5. Incompatible materials

See section reactivity.

10.6. Hazardous decomposition products

carbon oxides.

Hydrocarbons

nitrogen oxides

Rapid polymerisation may generate excessive heat and pressure.

SECTION 11: Toxicological information

Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute oral toxicity:

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

Hazardous substances	Value	Value	Species	Method
CAS-No.	type			
Tetrahydrofurfuryl	LD50	3.945 mg/kg	rat	OECD Guideline 401 (Acute Oral Toxicity)
methacrylate				
2455-24-5				
Hydroxypropyl	LD50	> 2.000 mg/kg	rat	OECD Guideline 401 (Acute Oral Toxicity)
methacrylate				
27813-02-1				
Cumene hydroperoxide	LD50	382 mg/kg	rat	other guideline:
80-15-9				
1-Methyltrimethylene	LD50	> 5.000 mg/kg	rat	not specified
dimethacrylate				
1189-08-8				
methyl methacrylate	LD50	9.400 mg/kg	rat	not specified
80-62-6				
methacrylicacid	LD50	1.320 mg/kg	rat	equivalent or similar to OECD Guideline 401 (Acute Oral
79-41-4				Toxicity)

Acute dermal toxicity:

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

Hazardous substances	Value	Value	Species	Method
CAS-No.	type			
Hydroxypropyl methacrylate 27813-02-1	LD50	> 5.000 mg/kg	rabbit	not specified
Cumene hydroperoxide 80-15-9	Acute toxicity estimate (ATE)	1.100 mg/kg		Expert judgement
1-Methyltrimethylene dimethacrylate 1189-08-8	LD50	> 3.000 mg/kg	rabbit	not specified
methyl methacrylate 80-62-6	LD50	> 5.000 mg/kg	rabbit	not specified
methacrylic acid 79-41-4	LD50	500 - 1.000 mg/kg	rabbit	Dermal Toxicity Screening
methacrylic acid 79-41-4	Acute toxicity estimate (ATE)	500 mg/kg		Expert judgement

Acute inhalative toxicity:

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

Hazardous substances	Value	Value	Test atmosphere	Exposure	Species	Method
CAS-No.	type			time		
Cumene hydroperoxide 80-15-9	LC50	1,370 mg/l	vapour	4 h	rat	not specified
methyl methacrylate 80-62-6	LC50	29,8 mg/l	vapour	4 h	rat	not specified
methacrylic acid 79-41-4	LC50	> 3,6 mg/l	dust/mist	4 h	rat	OECD Guideline 403 (Acute Inhalation Toxicity)
methacrylic acid 79-41-4	Acute toxicity estimate (ATE)	3,61 mg/l				Expert judgement

Skin corrosion/irritation:

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

Hazardous substances CAS-No.	Result	Exposure time	Species	Method
Tetrahydrofurfuryl methacrylate 2455-24-5	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
methacrylic acid 79-41-4	corrosive	3 min	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

Serious eye damage/irritation:

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

Hazardous substances CAS-No.	Result	Exposure time	Species	Method
Tetrahydrofurfuryl methacrylate 2455-24-5	not irritating		rabbit	Draize Test
Hydroxypropyl methacrylate 27813-02-1	Category 2B (mildly irritating to eyes)		rabbit	Draize Test
methacrylic acid 79-41-4	corrosive		rabbit	Draize Test

Respiratory or skin sensitization:

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

Hazardous substances CAS-No.	Result	Test type	Species	Method
Tetrahydrofurfuryl methacrylate 2455-24-5	sensitising	Patch-Test	human	not specified
Tetrahydrofurfuryl methacrylate 2455-24-5	sensitising	Direct peptide reactivity assay (DPRA)	cysteine and lysine, in chemico test	not specified
Hydroxypropyl methacrylate 27813-02-1	not sensitising	Mouse local lymphnode assay (LLNA)	mouse	equivalent or similar to OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
Hydroxypropyl methacrylate 27813-02-1	sensitising	Guinea pig maximisation test	guinea pig	not specified
1-Methyltrimethylene dimethacrylate 1189-08-8	sensitising	Mouse local lymphnode assay (LLNA)	mouse	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
methyl methacrylate 80-62-6	sensitising	Mouse local lymphnode assay (LLNA)	mouse	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
methacrylic acid 79-41-4	not sensitising	Buehler test	guinea pig	equivalent or similar to OECD Guideline 406 (Skin Sensitisation)

Germ cell mutagenicity:

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

Hazardous substances CAS-No.	Result	Type of study/ Route of administration	Metabolic activation / Exposure time	Species	Method
Hydroxypropyl	negative	bacterial reverse	with and without		OECD Guideline 471
methacrylate 27813-02-1		mutation assay (e.g Ames test)			(Bacterial Reverse Mutation Assay)
Hydroxypropyl methacrylate 27813-02-1	positive	in vitro mammalian chromosome aberration test	with and without		Chromosome Aberration Test
Hydroxypropyl	negative	mammalian cell	with and without		OECD Guideline 476 (In vitro
methacrylate 27813-02-1		gene mutation assay			Mammalian Cell Gene Mutation Test)
Cumene hydroperoxide 80-15-9	positive	bacterial reverse mutation assay (e.g Ames test)	without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
methyl methacrylate 80-62-6	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		not specified
methacrylic acid 79-41-4	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		equivalent or similar to OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Hydroxypropyl methacrylate 27813-02-1	negative	oral: gavage		mouse	OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)
Hydroxypropyl methacrylate 27813-02-1	negative	oral: gavage		Drosophila melanogaster	not specified
Cumene hydroperoxide 80-15-9	negative	dermal		mouse	not specified
methacrylic acid 79-41-4	negative	inhalation		mouse	equivalent or similar to OECD Guideline 478 (Genetic Toxicology: Rodent Dominant Lethal Test)
methacrylic acid 79-41-4	negative	oral: gavage		mouse	equivalent or similar to OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)

Carcinogenicity

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

Hazardous components CAS-No.	Result	Route of application	Exposure time / Frequency of treatment	Species	Sex	Method
Hydroxypropyl methacrylate 27813-02-1	not carcinogenic	inhalation	2 y 6 h/d, 5 d/w	rat	male	equivalent or similar OECD Guideline 451 (Carcinogenicity Studies)
methacrylic acid 79-41-4	not carcinogenic	inhalation	2 y	mouse	male/female	OECD Guideline 451 (Carcinogenicity Studies)

Reproductive toxicity:

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

Hazardous substances CAS-No.	Result / Value	Test type	Route of application	Species	Method
Tetrahydrofurfuryl methacrylate 2455-24-5	NOAEL P 300 mg/kg	screening	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 300 mg/kg NOAEL F1 1.000 mg/kg	screening	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 NOAEL F1 400 mg/kg	two- generation study	oral: gavage	rat	OECD Guideline 416 (Two- Generation Reproduction Toxicity Study)
methacrylic acid 79-41-4	NOAEL P 50 mg/kg NOAEL F1 400 mg/kg NOAEL F2 400 mg/kg	Two generation study	oral: gavage	rat	OECD Guideline 416 (Two-Generation Reproduction Toxicity Study)

STOT-single exposure:

No data available.

$STOT\text{-}repeated\,exposure::\\$

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

Hazardous substances CAS-No.	Result / Value	Route of application	Exposure time / Frequency of treatment	Species	Method
Tetrahydrofurfuryl methacrylate 2455-24-5	NOAEL 300 mg/kg	oral: gavage	29 d yes, concurrent vehicle	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	49 d daily	rat	OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
Hydroxypropyl methacrylate 27813-02-1	NOAEL 0,352 mg/l	inhalation	90 d 6 h/d, 5 d/w	rat	OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day)
Cumene hydroperoxide 80-15-9		inhalation: aerosol	6 h/d 5 d/w	rat	not specified
methyl methacrylate 80-62-6	LOAEL 2000 ppm	inhalation	14 weeks 6 hrs/day, 5 days/wk	mouse	Dose Range Finding Study
methyl methacrylate 80-62-6	NOAEL 1000 ppm	inhalation	14 weeks 6 hrs/day, 5 days/wk	mouse	Dose Range Finding Study
methacrylic acid 79-41-4		inhalation	90 d 6 h/d, 5 d/w	rat	OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day)

Aspiration hazard:

No data available.

11.2 Information on other hazards

not applicable

SECTION 12: Ecological information

General ecological information:

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

12.1. Toxicity

Toxicity (Fish):

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

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
Tetrahydrofurfuryl methacrylate	LC50	34,7 mg/l	96 h	Pimephales promelas	OECD Guideline 203 (Fish, Acute Toxicity Test)
2455-24-5	LC50	493 mg/l	48 h	Leuciscus idus melanotus	DIN 38412-15
Hydroxypropyl methacrylate 27813-02-1	LCSU	493 mg/l	48 n	Leuciscus idus meianotus	DIN 38412-13
Cumene hydroperoxide 80-15-9	LC50	3,9 mg/l	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish, Acute Toxicity Test)
00.107	T 050	22.7. //	40.1		• /
1-Methyltrimethylene dimethacrylate 1189-08-8	LC50	32,5 mg/l	48 h		DIN 38412-15
methyl methacrylate	LC50	350 mg/l	96 h	Leuciscus idus	OECD Guideline 203 (Fish,
80-62-6					Acute Toxicity Test)
methacrylic acid	LC50	85 mg/l	96 h	Salmo gairdneri (new name:	EPA OT S 797.1400 (Fish
79-41-4				Oncorhynchus mykiss)	Acute Toxicity Test)

Toxicity (Daphnia):

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

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
Hydroxypropyl methacrylate	EC50	> 143 mg/l	48 h	Daphnia magna	OECD Guideline 202
27813-02-1					(Daphnia sp. Acute
					Immobilisation Test)
Cumene hydroperoxide	EC50	18,84 mg/l	48 h	Daphnia magna	OECD Guideline 202
80-15-9					(Daphnia sp. Acute
					Immobilisation Test)
methyl methacrylate	EC50	69 mg/l	48 h	Daphnia magna	EPA OT S 797.1300
80-62-6					(Aquatic Invertebrate Acute
					Toxicity Test, Freshwater
					Daphnids)
methacrylic acid	EC50	> 130 mg/l	48 h	Daphnia magna	EPA OTS797.1300
79-41-4					(Aquatic Invertebrate Acute
					Toxicity Test, Freshwater
					Daphnids)

Chronic toxicity to aquatic invertebrates

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

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
Tetrahydrofurfuryl	NOEC	37,2 mg/l	21 d	Daphnia magna	OECD 211 (Daphnia
methacrylate					magna, Reproduction Test)
2455-24-5					
Hydroxypropyl methacrylate	NOEC	45,2 mg/l	21 d	Daphnia magna	OECD 211 (Daphnia
27813-02-1					magna, Reproduction Test)
1-Methyltrimethylene	NOEC	5,09 mg/l	21 d	Daphnia magna	OECD 211 (Daphnia
dimethacrylate					magna, Reproduction Test)
1189-08-8					
methyl methacrylate	NOEC	37 mg/l	21 d	Daphnia magna	OECD 211 (Daphnia
80-62-6					magna, Reproduction Test)

Toxicity (Algae):

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

Hazardous substances	zardous substances Value Value Exposure time Species		Species	Method	
CAS-No.	type		_	1	
Tetrahydrofurfuryl methacrylate 2455-24-5	EC50	> 100 mg/l	72 h	Desmodesmus subspicatus	OECD Guideline 201 (Alga, Growth Inhibition Test)
Tetrahydrofurfuryl methacrylate 2455-24-5	NOEC	> 100 mg/l	72 h	Desmodesmus subspicatus	OECD Guideline 201 (Alga, Growth Inhibition Test)
Hydroxypropyl methacrylate 27813-02-1	EC50	> 97,2 mg/l	72 h	Pseudokirchneriella subcapitata	Growth Inhibition Test)
Hydroxypropyl methacrylate 27813-02-1	NOEC	> 97,2 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
Cumene hydroperoxide 80-15-9	EC50	3,1 mg/l	72 h	Desmodesmus subspicatus (reported as Scenedesmus subspicatus)	OECD Guideline 201 (Alga, Growth Inhibition Test)
Cumene hydroperoxide 80-15-9	NOEC	l mg/l	72 h	Desmodesmus subspicatus (reported as Scenedesmus subspicatus)	OECD Guideline 201 (Alga, Growth Inhibition Test)
1-Methyltrimethylene dimethacrylate 1189-08-8	EC50	9,79 mg/l	72 h	Desmodesmus subspicatus	OECD Guideline 201 (Alga, Growth Inhibition Test)
1-Methyltrimethylene dimethacrylate 1189-08-8	NOEC	2,11 mg/l	72 h	Desmodesmus subspicatus	OECD Guideline 201 (Alga, Growth Inhibition Test)
methyl methacrylate 80-62-6	EC50	170 mg/l	96 h	Selenastrum capricomutum (new name: Pseudokirchneriella subcapitata)	OECD Guideline 201 (Alga, Growth Inhibition Test)
methyl methacrylate 80-62-6	NOEC	100 mg/l	96 h	Selenastrum capricomutum (new name: Pseudokirchneriella subcapitata)	OECD Guideline 201 (Alga, Growth Inhibition Test)
methacrylic acid 79-41-4	NOEC	8,2 mg/l	72 h	Selenastrum capricomutum (new name: Pseudokirchneriella subcapitata)	OECD Guideline 201 (Alga, Growth Inhibition Test)
methacrylic acid 79-41-4	EC50	45 mg/l	72 h	Selenastrum capricomutum (new name: Pseudokirchneriella subcapitata)	OECD Guideline 201 (Alga, Growth Inhibition Test)

Toxicity to microorganisms

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

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
Hydroxypropyl methacrylate	EC10	1.140 mg/l	16 h		not specified
27813-02-1					
Cumene hydroperoxide	EC10	70 mg/l	30 min		not specified
80-15-9					
1-Methyltrimethylene	NOEC	20 mg/l	28 d	activated sludge, domestic	not specified
dimethacrylate					
1189-08-8					
methyl methacrylate	EC20	> 150 - 200 mg/l	30 min	activated sludge, domestic	ISO 8192 (Test for
80-62-6					Inhibition of Oxygen
					Consumption by Activated
					Sludge)
methacrylic acid	EC10	100 mg/l	17 h		not specified
79-41-4					

12.2. Persistence and degradability

Haz ardous substances CAS-No.	Result	Test type	Degradability	Exposure time	Method
Tetrahydrofurfuryl methacrylate 2455-24-5	not readily biodegradable.	aerobic	75 %	28 d	OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)
Hydroxypropyl methacrylate 27813-02-1	readily biodegradable	aerobic	94,2 %	28 d	OECD Guideline 301 E (Ready biodegradability: Modified OECD Screening Test)
Cumene hydroperoxide 80-15-9	not readily biodegradable.	aerobic	3 %	28 d	OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)
1-Methyltrimethylene dimethacrylate 1189-08-8	readily biodegradable	aerobic	84 %	28 d	OECD Guideline 310 (Ready Biodegradability CO2 in Sealed Vessels (Headspace Test)
methyl methacrylate 80-62-6	readily biodegradable	aerobic	94 %	14 d	OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I))
methacrylic acid 79-41-4	inherently biodegradable	aerobic	100 %	14 d	OECD Guideline 302 B (Inherent biodegradability: Zahn- Wellens/EMPA Test)
methacrylic acid 79-41-4	readily biodegradable	aerobic	86 %	28 d	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)

${\bf 12.3. \, Bio accumulative \, \, potential}$

Hazardous substances	Bioconcentratio	Exposure time	Temperature	Species	Method
CAS-No.	n factor (BCF)				
Cumene hydroperoxide	9,1			calculation	OECD Guideline 305
80-15-9					(Bioconcentration: Flow-through
					Fish Test)

12.4. Mobility in soil

Hazardous substances CAS-No.	LogPow	Temperature	Method
Tetrahydrofurfuryl methacrylate 2455-24-5	1,76		EU Method A.8 (Partition Coefficient)
Hydroxypropyl methacrylate 27813-02-1	0,97	20 °C	not specified
Cumene hydroperoxide 80-15-9	1,6	25 °C	OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC Method)
methyl methacrylate 80-62-6	1,38	20 °C	other guideline:
methacrylic acid 79-41-4	0,93	22 °C	OECD Guideline 107 (Partition Coefficient (n-octanol/water), Shake Flask Method)

12.5. Results of PBT and vPvB assessment

Hazardous substances	PBT/ vPvB
CAS-No.	
Tetrahydrofurfuryl methacrylate	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
2455-24-5	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.
1-Methyltrimethylene dimethacrylate	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
1189-08-8	Bioaccumulative (vPvB) criteria.
methyl methacrylate	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
80-62-6	Bioaccumulative (vPvB) criteria.
methacrylic acid	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
79-41-4	Bioaccumulative (vPvB) criteria.

12.6. Endocrine disrupting properties

not applicable

12.7. 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.

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

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

ADR	Not dangerous	goods
RID	Not dangerous	goods
ADN	Not dangerous	goods
IMDG	Not dangerous	goods
IATA	Not dangerous	goods

14.2. UN proper shipping name

ADR	Not dangerous	goods
RID	Not dangerous	goods
ADN	Not dangerous	goods
IMDG	Not dangerous	goods
IATA	Not dangerous	goods

14.3. Transport hazard class(es)

ADR	Not dangerous	goods
RID	Not dangerous	goods
ADN	Not dangerous	goods
IMDG	Not dangerous	goods
IATA	Not dangerous	goods

14.4. Packing group

ADR	Not dangerous	goods
RID	Not dangerous	goods
ADN	Not dangerous	goods
IMDG	Not dangerous	goods
IATA	Not dangerous	goods

14.5. Environmental hazards

ADR	not applicable
RID	not applicable
ADN	not applicable
IMDG	not applicable
IATA	not applicable

14.6. Special precautions for user

ADR	not applicable
RID	not applicable
ADN	not applicable
IMDG	not applicable
IATA	not applicable

14.7. Maritime transport in bulk according to IMO instruments

not applicable

SECTION 15: Regulatory information

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

Ozone Depleting Substance (ODS) (Regulation (EC) No 1005/2009): Prior Informed Consent (PIC) (Regulation (EU) No 649/2012): Persistent organic pollutants (Regulation (EU) 2019/1021):

Not applicable Not applicable Not applicable

VOC content (2010/75/EC)

15.2. Chemical safety assessment

A chemical safety assessment has not been carried out.

SECTION 16: Other information

The labelling of the product is indicated in Section 2. The full text

of all abbreviations indicated by codes in this safety data sheet are as follows:

H225 Highly flammable liquid and vapor.

H242 Heating may cause a fire.

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.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H330 Fatal if inhaled.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

H360D May damage the unborn child.

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

H411 Toxic to aquatic life with long lasting effects.

H412 Harmful to aquatic life with long lasting effects.

ED: Substance identified as having endocrine disrupting properties

EU OEL: Substance with a Union workplace exposure limit
EU EXPLD 1: Substance listed in Annex I, Reg (EC) No. 2019/1148
EU EXPLD 2 Substance listed in Annex II, Reg (EC) No. 2019/1148
SVHC: Substance of very high concern (REACH Candidate List)
PBT: Substance fulfilling persistent, bioaccumulative and toxic criteria

PBT/vPvB: Substance fulfilling persistent, bioaccumulative and toxic plus very persistent and very

bioaccumulative criteria

vPvB: Substance fulfilling very persistent and very bioaccumulative criteria

Further information:

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This information is based on our current level of knowledge and relates to the product in the state in which it is delivered. It is intended to describe our products from the point of view of safety requirements and is not intended to guarantee any particular properties.

Dear Customer,

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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.



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

Page 1 of 16

SDS No.: 173280

V008.0 Revision: 08.03.2022

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Replaces version from: 28.09.2020

LOCTITE SF 7386 ACTIVATOR known as 7386 18 ML

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

1.1. Product identifier

LOCTITE SF 7386 ACTIVATOR known as 7386 18 ML

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

Intended use:

Activator

1.3. Details of the supplier of the safety data sheet

Henkel Ltd

Adhesives

Wood Lane End

HP24RQ Hemel Hempstead

Great Britain

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

ua-productsafety.uk@henkel.com

For Safety Data Sheet updates please visit our website https://mysds.henkel.com/index.html#/appSelection or www.henkel-adhesives.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):

Flammable liquids	Category 2
H225 Highly flammable liquid and vapor.	
Acute toxicity	Category 4
H302 Harmful if swallowed.	
Route of Exposure: Oral	
Skin irritation	Category 2
H315 Causes skin irritation.	
Serious eye irritation	Category 2
H319 Causes serious eye irritation.	
Specific target organ toxicity - single exposure	Category 3
H336 May cause drowsiness or dizziness.	
Target organ: Central nervous system	
Aspiration hazard	Category 1
H304 May be fatal if swallowed and enters airways.	

Acute hazards to the aquatic environment	Category 1
H400 Very toxic to aquatic life.	
Chronic hazards to the aquatic environment	Category 1
H410 Very toxic to aquatic life with long lasting effects.	

2.2. Label elements

Label elements (CLP):



Contains

Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics; < 0,1% benzene

Diethyl-phenyl-propyl-dihydropyridine Propan-2-ol

Signal word:	Danger
Hazard statement:	H225 Highly flammable liquid and vapor. H302 Harmful if swallowed. H304 May be fatal if swallowed and enters airways. H315 Causes skin irritation. H319 Causes serious eye irritation.
	H336 May cause drowsiness or dizziness. H410 Very toxic 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 contents/container in accordance with national regulation.***
Precautionary statement: Prevention	P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P261 Avoid breathing vapors. P273 Avoid release to the environment.
Precautionary statement: Response	P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor. P302+P352 IF ON SKIN: Wash with plenty of soap and water. P331 Do NOT induce vomiting. P337+P313 If eye irritation persists: Get medical advice/attention.
Precautionary statement: Storage	P403+P235 Store in a well-ventilated place. Keep cool.

2.3. Other hazards

None if used properly.

Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.

Following substances are present in a concentration >= 0.1% and fulfill the criteria for PBT/vPvB, or were identified as endocrine disruptor (ED):

This mixture does not contain any substances in concentration \geq the concentration limit that are assessed to be a PBT, vPvB or ED.

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.	Concentration	Classification	Specific Conc. Limits, M- factors and ATEs	Add. Information
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics; < 0,1% benzene 64742-49-0 265-151-9 01-2119475515-33	50- < 75 %	Asp. Tox. 1, H304 Skin Irrit. 2, H315 Flam. Liq. 2, H225 STOT SE 3, H336 Aquatic Chronic 2, H411	inhalation:ATE = 23,31 mg/l;	
Diethyl-phenyl-propyl- dihydropyridine 34562-31-7 252-091-3 01-2120769712-47	25- < 50 %	Aquatic Acute 1, H400 Acute Tox. 4, Oral, H302 Skin Irrit. 2, Dermal, H315 Eye Irrit. 2, H319 Aquatic Chronic 1, H410	M acute = 10 M chronic = 10 ===== oral:ATE = 501 mg/kg	
Propan-2-ol 67-63-0 200-661-7 01-2119457558-25	10- < 25 %	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336		

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 if necessary.

Ingestion:

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

After ingestion or vomit: danger of product entering the lung.

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

EYE: Irritation, conjunctivitis.

SKIN: Redness, inflammation.

INGESTION: Nausea, vomiting, diarrhea, abdominal pain.

ASPIRATION: Coughing, shortness of breath, nausea. Delayed effect: bronchopneumonia or pulmonary oedema

Vapors may cause drowsiness and dizziness.

4.3. Indication of any immediate medical attention and special treatment needed

Swallowing may cause irritation of mouth, throat and digestive tract, diarrhea and vomiting

Do not induce vomiting.

Seek medical attention from a specialist. See section: Description of first aid measures

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Foam, extinguishing powder, carbon dioxide.

Extinguishing media which must not be used for safety reasons:

High pressure waterjet

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. Vapours may accumulate in low or confined areas, travel considerable distance to source of ignition, and flash back.

5.3. Advice for firefighters

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

Additional information:

In case of fire, keep containers cool with water spray.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid contact with skin and eyes.

Ensure adequate ventilation.

Wear protective equipment.

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

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

Dispose of contaminated material as waste according to Section 13.

6.4. Reference to other sections

See advice in section 8

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Keep away from sources of ignition - no smoking. Vapours should be extracted to avoid inhalation. Use only in well-ventilated areas. Avoid skin and eye contact.

See advice in section 8

Hygiene measures:

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

7.2. Conditions for safe storage, including any incompatibilities

Store in a cool, dry place.

Do not store near sources of heat or ignition, or reactive materials.

Refer to Technical Data Sheet

7.3. Specific end use(s)

Activator

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational Exposure Limits

Valid for

Great Britain

Ingredient [Regulated substance]	ppm	mg/m ³	V I	Shortterm exposure limit category/Remarks	Regulatorylist
Propan-2-ol 67-63-0	400	999	Time Weighted Average (TWA):		EH40 WEL
[PROPAN-2-OL]					
Propan-2-ol 67-63-0 [PROPAN-2-OL]	500	1.250	Short Term Exposure Limit (STEL):	15 minutes	EH40 WEL

Occupational Exposure Limits

Valid for

Ireland

In gre dient [Regulated substance]	ppm	mg/m ³	Value type	Shortterm exposure limit category / Remarks	Regulatorylist
Propan-2-ol	200		Time Weighted Average		IR_OEL
67-63-0			(TWA):		
[ISOPROPYL ALCOHOL]					
Propan-2-ol			Skin designation:	Can be absorbed through the	IR_OEL
67-63-0				skin.	
[ISOPROPYL ALCOHOL]					
Propan-2-ol	400		Short Term Exposure	15 minutes	IR_OEL
67-63-0			Limit (STEL):		
[ISOPROPYL ALCOHOL]					

Predicted No-Effect Concentration (PNEC):

Name on list	Environmental		Value	Value			Remarks
	Compartment	period					
			mg/l	ppm	mg/kg	others	
Propan-2-ol 67-63-0	aqua (freshwater)		140,9 mg/l				
Propan-2-ol 67-63-0	aqua (marine water)		140,9 mg/l				
Propan-2-ol 67-63-0	sediment (freshwater)				552 mg/kg		
Propan-2-ol 67-63-0	sediment (marine water)				552 mg/kg		
Propan-2-ol 67-63-0	Soil				28 mg/kg		
Propan-2-ol 67-63-0	aqua (intermittent releases)		140,9 mg/l				
Propan-2-ol 67-63-0	sewage treatment plant (STP)		2251 mg/l				
Propan-2-ol 67-63-0	oral				160 mg/kg		

Derived No-Effect Level (DNEL):

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics; < 0,1% benzene 64742-49-0	Workers	dermal	Long term exposure - systemic effects		300 mg/kg	
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics; < 0,1% benzene 64742-49-0	Workers	Inhalation	Long term exposure - systemic effects		2085 mg/m3	
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics; < 0,1% benzene 64742-49-0	General population	dermal	Long term exposure - systemic effects		149 mg/kg	
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics; < 0,1% benzene 64742-49-0	General population	oral	Long term exposure - systemic effects		149 mg/kg	
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics; < 0,1% benzene 64742-49-0	General population	Inhalation	Long term exposure - systemic effects		447 mg/m3	
Propan-2-ol 67-63-0	Workers	dermal	Long term exposure - systemic effects		888 mg/kg	
Propan-2-ol 67-63-0	Workers	inhalation	Long term exposure - systemic effects		500 mg/m3	
Propan-2-ol 67-63-0	General population	dermal	Long term exposure - systemic effects		319 mg/kg	
Propan-2-ol 67-63-0	General population	inhalation	Long term exposure - systemic effects		89 mg/m3	
Propan-2-ol 67-63-0	General population	oral	Long term exposure - systemic effects		26 mg/kg	

Biological Exposure Indices:

None

8.2. Exposure controls:

Engineering controls:

Ensure good ventilation/extraction.

Respiratory protection:

Ensure adequate ventilation.

An approved mask or respirator fitted with an organic vapour cartridge should be worn if the product is used in a poorly ventilated area

Filter type: A (EN 14387)

Hand protection:

Chemical-resistant protective gloves (EN 374).

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

nitrile rubber (NBR; >= 0.4 mm thickness)

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

nitrile rubber (NBR; >= 0.4 mm thickness)

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

Eye protection:

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

Skin protection:

Wear suitable protective clothing.

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

Advices to personal protection equipment:

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

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state liquid
Delivery form liquid

Colour yellow, Amber,

greenish

Odor characteristic

Initial boiling point 82 °C (179.6 °F)no method

Explosive limits

lower 0,6 %(V); upper 12 %(V);

Flash point -5 °C (23 °F)
pH Not applicable
Solubility (qualitative) Insoluble
Vapour pressure 43 hPa

(20 °C (68 °F))

Density 0,791 g/cm3 None

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9.2. Other information

Other information not applicable for this product

SECTION 10: Stability and reactivity

10.1. Reactivity

Strong oxidizing agents.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

See section reactivity

10.4. Conditions to avoid

Stable under normal conditions of storage and use. Heat, flames, sparks and other sources of ignition.

10.5. Incompatible materials

See section reactivity.

10.6. Hazardous decomposition products

None if used for intended purpose.

SECTION 11: Toxicological information

Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute oral toxicity:

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

Hazardous substances	Value	Value	Species	Method
CAS-No.	type			
Hydrocarbons, C7, n- alkanes, isoalkanes, cyclics; < 0,1% benzene 64742-49-0	LD50	> 5.840 mg/kg	rat	not specified
Diethyl-phenyl-propyl- dihydropyridine 34562-31-7	LD50	> 500 mg/kg	rat	other guideline:
Diethyl-phenyl-propyl- dihydropyridine 34562-31-7	Acute toxicity estimate (ATE)	501 mg/kg		Expert judgement
Propan-2-ol 67-63-0	LD50	5.840 mg/kg	rat	equivalent or similar to OECD Guideline 401 (Acute Oral Toxicity)

Acute dermal toxicity:

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

Hazardous substances CAS-No.	Value	Value	Species	Method
Hydrocarbons, C7, n- alkanes, isoalkanes, cyclics; < 0,1% benzene 64742-49-0	LD50	> 2.800 mg/kg	rat	other guideline:
Diethyl-phenyl-propyl- dihydropyridine 34562-31-7	LD50	> 1.000 mg/kg	rabbit	other guideline:
Propan-2-ol 67-63-0	LD50	12.870 mg/kg	rabbit	OECD Guideline 402 (Acute Dermal Toxicity)

Acute inhalative toxicity:

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

Haz ardous substances	Value	Value	Test atmosphere	Exposure	Species	Method
CAS-No.	type			time		
Hydrocarbons, C7, n-	LC50	> 23,3 mg/l	vapour	4 h	rat	equivalent or similar to OECD
alkanes, isoalkanes,						Guideline 403 (Acute
cyclics; < 0,1% benzene						Inhalation Toxicity)
64742-49-0						-
Hydrocarbons, C7, n-	Acute	23,31 mg/l				Expert judgement
alkanes, isoalkanes,	toxicity					
cyclics; < 0,1% benzene	estimate					
64742-49-0	(ATE)					

Skin corrosion/irritation:

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

Hazardous substances CAS-No.	Result	Exposure time	Species	Method
Hydrocarbons, C7, n- alkanes, isoalkanes, cyclics; < 0,1% benzene 64742-49-0	irritating	4 h	rabbit	equivalent or similar to OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
Diethyl-phenyl-propyl- dihydropyridine 34562-31-7	irritating	4 h	rabbit	EPA OTS 798.4470 (Acute Dermal Irritation)
Diethyl-phenyl-propyl- dihydropyridine 34562-31-7	not corrosive		Corrositex Biobarrier Membrane (reconstituted collagen matrix)	OECD Guideline 435 (In Vitro Membrane Barrier Test Method for Skin Corrosion)
Propan-2-ol 67-63-0	slightly irritating	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

Serious eye damage/irritation:

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

Hazardous substances CAS-No.	Result	Exposure time	Species	Method
Hydrocarbons, C7, n- alkanes, isoalkanes, cyclics; < 0,1% benzene 64742-49-0	not irritating		rabbit	FDA Guideline
Diethyl-phenyl-propyl- dihydropyridine 34562-31-7	irritating		rabbit	EPA OTS798.4500 (Acute Eye Irritation)
Propan-2-ol 67-63-0	Category II		rabbit	equivalent or similar to OECD Guideline 405 (Acute Eye Irritation/Corrosion)

Respiratory or skin sensitization:

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

Hazardous substances	Result	Test type	Species	Method
CAS-No.				
Hydrocarbons, C7, n-	not sensitising	Guinea pig maximisation	guinea pig	OECD Guideline 406 (Skin Sensitisation)
alkanes, isoalkanes,		test		
cyclics; < 0,1% benzene				
64742-49-0				
Propan-2-ol	not sensitising	Buehler test	guinea pig	OECD Guideline 406 (Skin Sensitisation)
67-63-0			- 10	·

Germ cell mutagenicity:

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

Hazardous substances	Result	Type of study/	Metabolic	Species	Method
CAS-No.		Route of	activation/		
		administration	Exposure time		
Propan-2-ol	negative	bacterial reverse	with and without		equivalent or similar to OECD
67-63-0		mutation assay (e.g			Guideline 471 (Bacterial
		Ames test)			Reverse Mutation Assay)
Propan-2-ol	negative	mammalian cell	with and without		equivalent or similar to OECD
67-63-0		gene mutation assay			Guideline 476 (In vitro
					Mammalian Cell Gene
					Mutation Test)
Propan-2-ol	negative	intraperitoneal		mouse	equivalent or similar to OECD
67-63-0					Guideline 474 (Mammalian
					Erythrocyte Micronucleus
					Test)

Carcinogenicity

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

Hazardous components	Result	Route of	Exposure	Species	Sex	Method
CAS-No.		application	time/			
			Frequency			
			of treatment			
Propan-2-ol		inhalation:	104 w	rat	male/female	OECD Guideline 451
67-63-0		vapour	6 h/d, 5 d/w			(Carcinogenicity
						Studies)

Reproductive toxicity:

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

Hazardous substances CAS-No.	Result / Value	Test type	Route of application	Species	Method
Propan-2-ol 67-63-0	NOAEL P 853 mg/kg	One generation study	oral: drinking water	rat	equivalent or similar to OECD Guideline 415 (One- Generation Reproduction Toxicity Study)
Propan-2-ol 67-63-0	NOAEL P 500 mg/kg NOAEL F1 1.000 mg/kg	Two generation study	oral: gavage	rat	equivalent or similar to OECD Guideline 416 (Two- Generation Reproduction Toxicity Study)

STOT-single exposure:

No data available.

STOT-repeated exposure::

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

Hazardous substances CAS-No.	Result / Value		Exposure time / Frequency of treatment	Species	Method
Propan-2-ol		inhalation:	at least 104 w	rat	OECD Guideline 451
67-63-0		vapour	6 h/d, 5 d/w		(Carcinogenicity Studies)

Aspiration hazard:

The mixture is classified based on Viscosity data.

Hazardous substances CAS-No.	Viscosity (kinematic) Value	Temperature	Method	Remarks
Propan-2-ol	1,8 mm2/s	40 °C	ASTM Standard D7042	
67-63-0				

11.2 Information on other hazards

not applicable

SECTION 12: Ecological information

General ecological information:

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

12.1. Toxicity

Toxicity (Fish):

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

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
Hydrocarbons, C7, n-alkanes,	LC50	> 13,4 mg/l	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish,
isoalkanes, cyclics; < 0,1%					Acute Toxicity Test)
benzene					-
64742-49-0					
Propan-2-ol	LC50	> 9.640 - 10.000 mg/l	96 h	Pimephales promelas	OECD Guideline 203 (Fish,
67-63-0					Acute Toxicity Test)

Toxicity (Daphnia):

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

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics; < 0,1%	EL50	3 mg/l	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute
benzene 64742-49-0					Immobilisation Test)
Diethyl-phenyl-propyl- dihydropyridine 34562-31-7	EC50	0,023 mg/l	48 h	1	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)

Chronic toxicity to aquatic invertebrates

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

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics; < 0,1%	NOEC	l mg/l	21 d		OECD 211 (Daphnia magna, Reproduction Test)
benzene 64742-49-0					
Propan-2-ol 67-63-0	NOEC	30 mg/l	21 d		OECD 211 (Daphnia magna, Reproduction Test)

Toxicity (Algae):

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

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
Hydrocarbons, C7, n-alkanes,	EL50	29 mg/l	96 h	Pseudokirchneriella subcapitata	
isoalkanes, cyclics; < 0,1%					Growth Inhibition Test)
benzene					
64742-49-0					
Hydrocarbons, C7, n-alkanes,	NOELR	6,3 mg/l	96 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga,
isoalkanes, cyclics; < 0,1%					Growth Inhibition Test)
benzene					
64742-49-0					
Diethyl-phenyl-propyl-	EC50	0,0431 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga,
dihydropyridine					Growth Inhibition Test)
34562-31-7					
Diethyl-phenyl-propyl-	NOEC	0,017 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga,
dihydropyridine				_	Growth Inhibition Test)
34562-31-7					
Propan-2-ol	EC50	> 1.000 mg/l	96 h	Scenedesmus subspicatus (new	OECD Guideline 201 (Alga,
67-63-0				name: Desmodesmus	Growth Inhibition Test)
				subspicatus)	
Propan-2-ol	NOEC	1.000 mg/l	96 h	Scenedesmus subspicatus (new	OECD Guideline 201 (Alga,
67-63-0				name: Desmodesmus	Growth Inhibition Test)
				subspicatus)	

Toxicity to microorganisms

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

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
Propan-2-ol	EC50	> 1.000 mg/l	3 h	activated sludge	OECD Guideline 209
67-63-0				_	(Activated Sludge,
					Respiration Inhibition Test)

12.2. Persistence and degradability

Hazardous substances CAS-No.	Result	Test type	Degradability	Exposure time	Method
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics; < 0,1% benzene 64742-49-0	readily biodegradable	aerobic	> 81 - 98 %	28 d	OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)
Diethyl-phenyl-propyl- dihydropyridine 34562-31-7	not readily biodegradable.	aerobic	> 0 - < 60 %	28 d	OECD 301 A - F
Propan-2-ol 67-63-0	readily biodegradable	aerobic	70 - 84 %	30 d	EU Method C.4-E (Determination of the "Ready" Biodegradability Closed Bottle Test)

12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

Hazardous substances	LogPow	Temperature	Method
CAS-No.			
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics; < 0,1%	4,66		EU Method A.8 (Partition Coefficient)
benzene 64742-49-0			
Diethyl-phenyl-propyl- dihydropyridine 34562-31-7	6,578		QSAR (Quantitative Structure Activity Relationship)
Propan-2-ol 67-63-0	0,05		OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method)

12.5. Results of PBT and vPvB assessment

Hazardous substances	PBT/ vPvB
CAS-No.	
Propan-2-ol	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
67-63-0	Bioaccumulative (vPvB) criteria.

12.6. Endocrine disrupting properties

not applicable

12.7. Other adverse effects

No data available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product disposal:

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

Dispose of in accordance with local and national regulations.

Disposal of uncleaned packages:

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

Waste code

14 06 03 - other solvents and solvent mixtures

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

SECTION 14: Transport information

14.1. UN number

ADR 1993 RID 1993 ADN 1993 IMDG 1993 IATA 1993

14.2. UN proper shipping name

ADR FLAMMABLE LIQUID, N.O.S. (Heptanes, Isopropanol)
RID FLAMMABLE LIQUID, N.O.S. (Heptanes, Isopropanol)
ADN FLAMMABLE LIQUID, N.O.S. (Heptanes, Isopropanol)

IMDG FLAMM ABLE LIQUID, N.O.S. (Heptanes, Isopropanol, 3,5-Diethyl-1,2-dihydro-1-

phenyl-2-propylpyridine)

IATA Flammable liquid, n.o.s. (Heptanes, Isopropanol)

14.3. Transport hazard class(es)

ADR 3 RID 3 ADN 3 IMDG 3 IATA 3

14.4. Packing group

ADR II
RID II
ADN II
IMDG II
IATA II

14.5. Environmental hazards

ADR Environmentally Hazardous RID Environmentally Hazardous ADN Environmentally Hazardous

IMDG Marine pollutant IATA not applicable

14.6. Special precautions for user

ADR Special provision 640D Tunnelcode: (D/E)

RID Special provision 640D ADN Special provision 640D

IMDG not applicable IATA not applicable

14.7. Maritime transport in bulk according to IMO instruments

not applicable

SECTION 15: Regulatory information

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

Ozone Depleting Substance (ODS) (Regulation (EC) No 1005/2009): Prior Informed Consent (PIC) (Regulation (EU) No 649/2012): Persistent organic pollutants (Regulation (EU) 2019/1021):

Not applicable Not applicable Not applicable

VOC content (2010/75/EC) 100 %

15.2. Chemical safety assessment

A chemical safety assessment has not been carried out.

SECTION 16: Other information

The labelling of the product is indicated in Section 2. The full text of all abbreviations indicated by codes in this safety data sheet are as follows:

H225 Highly flammable liquid and vapor.

H302 Harmful if swallowed.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

H411 Toxic to aquatic life with long lasting effects.

ED: Substance identified as having endocrine disrupting properties

EU OEL: Substance with a Union workplace exposure limit
EU EXPLD 1: Substance listed in Annex I, Reg (EC) No. 2019/1148
EU EXPLD 2 Substance listed in Annex II, Reg (EC) No. 2019/1148
SVHC: Substance of very high concern (REACH Candidate List)
PBT: Substance fulfilling persistent, bioaccumulative and toxic criteria

PBT/vPvB: Substance fulfilling persistent, bioaccumulative and toxic plus very persistent and very

bioaccumulative criteria

vPvB: Substance fulfilling very persistent and very bioaccumulative criteria

Further information:

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