

315 Output

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

Page 1 of 14

SDS No.: 153573 V007.0

Revision: 22.09.2016

printing date: 11.10.2016

Replaces version from: 29.07.2015

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

#### 1.1. Product identifier

315 Output

#### **Contains:**

Tetrahydrofurfuryl methacrylate Hydroxypropyl methacrylate Cumene hydroperoxide 1-Methyltrimethylene dimethacrylate

#### 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

# $\textbf{Classification} \ (\textbf{CLP}) \textbf{:}$

Skin irritation Category 2

H315 Causes skin irritation.

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

H360 May damage fertility or 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.

MSDS-No.: 153573 315 Output Page 2 of 14

V007.0

#### 2.2. Label elements

### Label elements (CLP):



Signal word:	Danger
Digital Word.	Dunger

Hazard statement:	H315 Causes skin irritation.
	H317 May cause an allergic skin reaction.
	H319 Causes serious eye irritation.
	H335 May cause respiratory irritation.
	H360 May damage fertility or 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 vapours.
	P273 Avoid release to the environment.
	P280 Wear protective gloves/protective clothing.

Precautionary statement:	P302+P352 IF ON SKIN: Wash with plenty of soap and water.
Response	P308+P313 IF exposed or concerned: Get medical advice/attention.
Response	P337+P313 If eye irritation persists: Get medical advice/attention.
	P333+P313 If skin irritation or rash occurs; Get medical advice/attention.

# 2.3. Other hazards

None if used properly.

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

# **SECTION 3: Composition/information on ingredients**

## 3.2. Mixtures

# General chemical description:

Anaerobic adhesive

MSDS-No.: 153573 315 Output Page 3 of 14

V007.0

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

Hazardous components CAS-No.	EC Number REACH-Reg No.	content	Classification
Tetrahydrofurfuryl methacrylate 2455-24-5	219-529-5	10- < 20 %	Skin Irrit. 2; Dermal H315 Eye Irrit. 2 H319 STOT SE 3; Inhalation H335 Repr. 1B H360 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	1-< 2,5 %	Acute Tox. 4; Dermal H312 STOT RE 2 H373 Acute Tox. 4; Oral H302 Org. Perox. E H242 Acute Tox. 3; Inhalation H331 Aquatic Chronic 2 H411 Skin Corr. 1B H314
Methacrylic acid 79-41-4	201-204-4 01-2119463884-26	0,1-< 1 %	Acute Tox. 4; Oral H302 Acute Tox. 3; Dermal H311 Acute Tox. 4; Inhalation H332 Skin Corr. 1A H314
1-Methyltrimethylene dimethacrylate 1189-08-8	214-711-0 01-2119969461-31	0,1-< 1 %	Skin Sens. 1B H317

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.

MSDS-No.: 153573 315 Output Page 4 of 14

V007.0

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

SKIN: Rash, Urticaria.

SKIN: Redness, inflammation.

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:

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

Do not expose to direct heat.

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

Toxic and irritating vapors.

### 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.

#### 6.4. Reference to other sections

See advice in section 8

# **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling

Use only in well-ventilated areas.

Avoid skin and eye contact.

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

See advice in section 8

#### Hygiene measures:

Good industrial hygiene practices should be observed.

Do not eat, drink or smoke while working.

Wash hands before work breaks and after finishing work.

MSDS-No.: 153573 315 Output Page 5 of 14

V007.0

# 7.2. Conditions for safe storage, including any incompatibilities

For optimum shelf life store in original containers under refrigerated conditions at 2 - 8°C (35.6 - 46.4 °F)

# **7.3. Specific end use(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 <sup>3</sup>	Value type	Short term exposure limit category / Remarks	Regulatory list
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
Methacrylic acid 79-41-4 [METHACRYLIC ACID]	40	143	Short Term Exposure Limit (STEL):		EH40 WEL
Methacrylic acid 79-41-4 [METHACRYLIC ACID]	20	72	Time Weighted Average (TWA):		EH40 WEL

# **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
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
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):		IR_OEL

MSDS-No.: 153573 315 Output Page 6 of 14

V007.0

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

Name on list	Environmental Compartment	Exposure period	Value				Remarks
	•	•	mg/l	ppm	mg/kg	others	
Methacrylic acid, monoester with propane- 1,2-diol 27813-02-1	aqua (freshwater)		3		3 3	0,904 mg/L	
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 27813-02-1	sewage treatment plant (STP)					10 mg/L	
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		
.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.,.alphaDimethylbenzyl 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		

MSDS-No.: 153573 315 Output Page 7 of 14

V007.0

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

Name on list	Application	Route of	Health Effect	Exposure	Value	Remarks
Methacrylic acid, monoester with propane-	Area Workers	Exposure dermal	Long term	Time	4,2 mg/kg bw/day	
1,2-diol	Workers	dermar	exposure -		+,2 mg/kg ow/day	
27813-02-1			systemic effects			
Methacrylic acid, monoester with propane-	Workers	Inhalation	Long term		14,7 mg/m3	
1,2-diol			exposure -		,	
27813-02-1			systemic effects			
Methacrylic acid, monoester with propane-	General	dermal	Long term		2,5 mg/kg bw/day	
1,2-diol	population		exposure -			
27813-02-1			systemic effects			
Methacrylic acid, monoester with propane-	General	Inhalation	Long term		8,8 mg/m3	
1,2-diol	population		exposure -			
27813-02-1			systemic effects			
Methacrylic acid, monoester with propane-	General	oral	Long term		2,5 mg/kg bw/day	
1,2-diol	population		exposure -			
27813-02-1			systemic effects			
.alpha.,.alphaDimethylbenzyl	Workers	inhalation	Long term		6 mg/m3	
hydroperoxide			exposure -			
80-15-9			systemic effects			
1-Methyltrimethylene dimethacrylate	Workers	inhalation	Long term		14,5 mg/m3	
1189-08-8			exposure -			
			systemic effects			
1-Methyltrimethylene dimethacrylate	Workers	dermal	Long term		4,2 mg/kg bw/day	
1189-08-8			exposure -			
			systemic effects			

#### **Biological Exposure Indices:**

None

#### 8.2. Exposure controls:

Engineering controls:

Ensure good ventilation/extraction.

Respiratory protection:

Use only in well-ventilated areas.

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

Filter type: A (EN 14387)

# Hand protection:

Chemical-resistant protective gloves (EN 374).

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

nitrile rubber (NBR; >= 0.4 mm thickness)

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

nitrile rubber (NBR;  $\geq$ = 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.

MSDS-No.: 153573 315 Output Page 8 of 14

V007.0

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 paste blue Odor mild

Odour threshold No data available / Not applicable

pH Not determined Initial boiling point > 150 °C (> 302 °F)

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

Decomposition temperature No data available / Not applicable

Vapour pressure < 6,5 mbar

(20 °C (68 °F)) Density 1,6 - 1,7 g/cm3

Bulk density

No data available / Not applicable
Viscosity

No data available / Not applicable
Viscosity (kinematic)

No data available / Not applicable
Explosive properties

No data available / Not applicable

Solubility (qualitative) Slight

(Solvent: Water)

Solubility (qualitative) Partially soluble

(Solvent: Acetone)

Solidification temperature No data available / Not applicable Melting point No data available / Not applicable Flammability No data available / Not applicable No data available / Not applicable Auto-ignition temperature No data available / Not applicable Explosive limits Partition coefficient: n-octanol/water No data available / Not applicable Evaporation rate No data available / Not applicable No data available / Not applicable Vapor density Oxidising properties No data available / Not applicable

#### 9.2. Other information

No data available / Not applicable

### **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.

#### 10.5. Incompatible materials

See section reactivity.

#### 10.6. Hazardous decomposition products

Oxides of carbon.

MSDS-No.: 153573 315 Output Page 9 of 14

V007.0

# **SECTION 11: Toxicological information**

### 11.1. Information on toxicological effects

# General toxicological information:

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

# STOT-single exposure:

May cause respiratory irritation.

### Oral toxicity:

May cause irritation to the digestive tract.

#### Skin irritation:

Causes skin irritation.

#### **Eve irritation:**

Causes serious eye irritation.

#### Sensitizing:

May cause an allergic skin reaction.

# Reproductive toxicity:

May damage fertility. May damage the unborn child.

### Acute oral toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Tetrahydrofurfuryl methacrylate 2455-24-5	LD50	4.000 mg/kg	oral		rat	OECD Guideline 401 (Acute Oral Toxicity)
Hydroxypropyl methacrylate 27813-02-1	LD50	> 2.000 mg/kg	oral		rat	OECD Guideline 401 (Acute Oral Toxicity)
Cumene hydroperoxide 80-15-9	LD50	550 mg/kg	oral		rat	not specified
Methacrylic acid 79-41-4	LD50	1.320 mg/kg	oral		rat	OECD Guideline 401 (Acute Oral Toxicity)
1-Methyltrimethylene dimethacrylate 1189-08-8	LD50	> 5.000 mg/kg	oral		rat	not specified

### Acute inhalative toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Methacrylic acid 79-41-4	LC50	> 3,6 mg/l	aerosol	4 h	rat	OECD Guideline 403 (Acute Inhalation Toxicity)

### Acute dermal toxicity:

Hazardous components	Value	Value	Route of	Exposure	Species	Method
CAS-No.	type		application	time		
Hydroxypropyl	LD50	> 5.000 mg/kg	dermal		rabbit	not specified
methacrylate						
27813-02-1						
Cumene hydroperoxide	LD50	1.200 - 1.520	dermal			not specified
80-15-9		mg/kg				
Methacrylic acid	Acute	500 mg/kg	dermal			Expert judgement
79-41-4	toxicity					
	estimate					
	(ATE)					
Methacrylic acid	LD50	500 - 1.000			rabbit	Dermal Toxicity Screening
79-41-4		mg/kg				
1-Methyltrimethylene	LD50	> 3.000 mg/kg	dermal		rabbit	not specified
dimethacrylate						
1189-08-8						

MSDS-No.: 153573 315 Output Page 10 of 14

V007.0

#### Skin corrosion/irritation:

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

# Serious eye damage/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
Methacrylic acid	Category I		rabbit	Draize Test
79-41-4				

### Respiratory or skin sensitization:

Hazardous components	Result	Test type	Species	Method
CAS-No.				
Methacrylic acid	not sensitising	Buehler	guinea pig	OECD Guideline 406 (Skin
79-41-4		test		Sensitisation)
1-Methyltrimethylene	sensitising	Mouse	mouse	OECD Guideline 429 (Skin
dimethacrylate		local		Sensitisation: Local Lymph
1189-08-8		lymphnod		Node Assay)
		e assay		
		(LLNA)		

### Germ cell mutagenicity:

Hazardous components CAS-No.	Result	Type of study / Route of administration	Metabolic activation / Exposure time	Species	Method
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	
Methacrylic acid 79-41-4	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Methacrylic acid 79-41-4	negative	inhalation		mouse	OECD Guideline 478 (Genetic Toxicology: Rodent Dominant Lethal 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 (EC) No 1272/2008. 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.

MSDS-No.: 153573 315 Output Page 11 of 14

V007.0

Hazardous components CAS-No.	Value type	Value	Acute Toxicity	Exposure time	Species	Method
	• • •		Study			
Tetrahydrofurfuryl methacrylate	LC50	34,7 mg/l	Fish	96 h	Pimephales promelas	OECD Guideline 203 (Fish, Acute
2455-24-5 Hydroxypropyl methacrylate 27813-02-1	LC50	493 mg/l	Fish	48 h	Leuciscus idus melanotus	Toxicity Test) DIN 38412-15
Hydroxypropyl methacrylate 27813-02-1	EC50	> 130 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp.
						Acute Immobilisation Test)
Hydroxypropyl methacrylate 27813-02-1	EC10	1.140 mg/l	Bacteria	16 h		2 523,
Cumene hydroperoxide 80-15-9	LC50	3,9 mg/l	Fish	96 h	Oncorhynchus mykiss	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
Cumene hydroperoxide 80-15-9	ErC50	3,1 mg/l	Algae	72 h	Pseudokirchnerella subcapitata	Test) OECD Guideline 201 (Alga, Growth Inhibition Test)
Cumene hydroperoxide 80-15-9	EC10	70 mg/l	Bacteria	30 min		initiotion rest)
Methacrylic acid 79-41-4	LC50	85 mg/l	Fish	96 h	Salmo gairdneri (new name: Oncorhynchus mykiss)	EPA OTS 797.1400 (Fish Acute Toxicity
Methacrylic acid 79-41-4	EC50	> 130 mg/l	Daphnia	48 h	Daphnia magna	Test) EPA OTS 797.1300 (Aquatic Invertebrate Acute Toxicity Test, Freshwater
Methacrylic acid 79-41-4	NOEC	8,2 mg/l	Algae	72 h	Selenastrum capricornutum (new name: Pseudokirchnerella subcapitata)	Daphnids) OECD Guideline
	EC50	45 mg/l	Algae	72 h	Selenastrum capricornutum (new name: Pseudokirchnerella	OECD Guideline
Methacrylic acid 79-41-4	EC10	100 mg/l	Bacteria	17 h	subcapitata)	minorion rest)
1-Methyltrimethylene dimethacrylate 1189-08-8	LC50	32,5 mg/l	Fish	48 h		DIN 38412-15
1-Methyltrimethylene dimethacrylate	EC50	9,79 mg/l	Algae	72 h	Desmodesmus subspicatus	OECD Guideline 201 (Alga, Growth
1189-08-8	NOEC	2,11 mg/l	Algae	72 h	Desmodesmus subspicatus	Inhibition Test) OECD Guideline 201 (Alga, Growth Inhibition Test)
1-Methyltrimethylene dimethacrylate 1189-08-8	NOEC	20 mg/l	Bacteria	28 d	activated sludge, domestic	not specified
1189-08-8 1-Methyltrimethylene dimethacrylate 1189-08-8	NOEC	5,09 mg/l	chronic Daphnia	21 d	Daphnia magna	OECD 211 (Daphnia magna, Reproduction Test)

# 12.2. Persistence and degradability

CAS No application	lazardous components	Result	Route of	Degradability	Method
CAS-110. application	CAS-No.		application		

MSDS-No.: 153573 315 Output Page 12 of 14

V007.0

Tetrahydrofurfuryl		aerobic	75 %	OECD Guideline 301 F (Ready
methacrylate				Biodegradability: Manometric
2455-24-5				Respirometry Test)
Hydroxypropyl methacrylate	readily biodegradable	aerobic	94,2 %	OECD Guideline 301 E (Ready
27813-02-1				biodegradability: Modified OECD
				Screening Test)
Cumene hydroperoxide		no data	0 %	OECD Guideline 301 B (Ready
80-15-9				Biodegradability: CO2 Evolution
				Test)
Methacrylic acid	inherently biodegradable	aerobic	100 %	OECD Guideline 302 B (Inherent
79-41-4				biodegradability: Zahn-
				Wellens/EMPA Test)
	readily biodegradable	aerobic	86 %	OECD Guideline 301 D (Ready
				Biodegradability: Closed Bottle
				Test)
1-Methyltrimethylene	readily biodegradable	aerobic	84 %	OECD Guideline 310 (Ready
dimethacrylate				BiodegradabilityCO2 in Sealed
1189-08-8				Vessels (Headspace Test)

# 12.3. Bioaccumulative potential / 12.4. Mobility in soil

# **Mobility:**

Cured adhesives are immobile.

Hazardous components CAS-No.	LogPow	Bioconcentration factor (BCF)	Exposure time	Species	Temperature	Method
Tetrahydrofurfuryl methacrylate 2455-24-5	1,35					OECD Guideline 107 (Partition Coefficient (noctanol / water), Shake Flask Method)
Hydroxypropyl methacrylate 27813-02-1	0,97					
Cumene hydroperoxide 80-15-9	216	9,1		calculation		OECD Guideline 305 (Bioconcentration: Flow- through Fish Test)
Cumene hydroperoxide 80-15-9	2,16					
Methacrylic acid 79-41-4	0,93				22 °C	OECD Guideline 107 (Partition Coefficient (noctanol / water), Shake Flask Method)

# 12.5. Results of PBT and vPvB assessment

Hazardous components	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.
Methacrylic acid	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
79-41-4	Bioaccumulative (vPvB) criteria.
1-Methyltrimethylene dimethacrylate	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
1189-08-8	Bioaccumulative (vPvB) criteria.

# 12.6. Other adverse effects

No data available.

# **SECTION 13: Disposal considerations**

### 13.1. Waste treatment methods

MSDS-No.: 153573 315 Output Page 13 of 14

V007.0

Product disposal:

Dispose of in accordance with local and national regulations.

Collection and delivery to recycling enterprise or other registered elimination institution.

Disposal of uncleaned packages:

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

#### Waste code

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

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

# **SECTION 14: Transport information**

#### 14.1. UN number

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

#### 14.2. UN proper shipping name

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

### 14.3. Transport hazard class(es)

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

#### 14.4. Packing group

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

#### 14.5. Environmental hazards

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

#### 14.6. Special precautions for user

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

# 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

not applicable

# **SECTION 15: Regulatory information**

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

VOC content (2010/75/EC)

< 3 %

#### 15.2. Chemical safety assessment

A chemical safety assessment has not been carried out.

MSDS-No.: 153573 315 Output Page 14 of 14

V007.0

# **SECTION 16: Other information**

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

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

H242 Heating may cause a fire.

H302 Harmful if swallowed.

H311 Toxic in contact with skin.

H312 Harmful in contact with skin.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H331 Toxic if inhaled.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

H360 May damage fertility or 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.

#### **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):

#### T - Toxic



# Risk phrases:

R60 May impair fertility.

R61 May cause harm to the unborn child.

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

R43 May cause sensitisation by skin contact.

#### Safety phrases:

S24 Avoid contact with skin.

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.

S36/37 Wear suitable protective clothing and gloves.

#### Additional labeling:

Restricted to professional users.

### Contains:

Tetrahydrofurfuryl methacrylate,

Hydroxypropyl methacrylate

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.



7386 Activator

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

Page 1 of 14

SDS No.: 173280

V005.4 Revision: 23.03.2016

printing date: 11.10.2016

Replaces version from: 21.04.2015

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

#### 1.1. Product identifier

7386 Activator

#### **Contains:**

Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics Diethyl-phenyl-propyl-dihydropyridine

#### 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 Wood Lane End

HP2 4RQ Hemel Hempstead

Great Britain

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

ua-products a fety.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):

Flammable liquids Category 2

 $H225 \quad Highly \ flammable \ liquid \ and \ vapor.$ 

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.

Chronic hazards to the aquatic environment Category 2

H411 Toxic to aquatic life with long lasting effects.

MSDS-No.: 173280 7386 Activator Page 2 of 14

V005.4

#### 2.2. Label elements

#### Label elements (CLP):

Hazard pictogram:



Signal word: Danger

**Hazard statement:** H225 Highly flammable liquid and vapor.

H302 Harmful if swallowed.

H304 May be fatal if swallowed and enters airways.

H319 Causes serious eye irritation. H315 Causes skin irritation.

H336 May cause drowsiness or dizziness.

H411 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 waste and residues in

accordance with local authority requirements\*\*\*

**Precautionary statement:** P210 Keep away from heat/open flames/hot surfaces. - No smoking.

**Prevention** P261 Avoid breathing vapours.

P273 Avoid release to the environment.

**Precautionary statement:** P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor.

**Response** P331 Do NOT induce vomiting.

P302+P352 IF ON SKIN: Wash with plenty of water.

P337+P313 If eye irritation persists: Get medical advice/attention.

# 2.3. Other hazards

None if used properly.

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

# **SECTION 3: Composition/information on ingredients**

#### 3.2. Mixtures

# General chemical description:

Solvent based activator.

MSDS-No.: 173280 7386 Activator Page 3 of 14

V005.4

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

Hazardous components CAS-No.	EC Number REACH-Reg No.	content	Classification
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics 93924-37-9	300-230-4 01-2119475515-33	50- < 75 %	Asp. Tox. 1 H304 Skin Irrit. 2 H315 Flam. Liq. 2 H225 STOT SE 3; Inhalation H336 Aquatic Chronic 2 H411
Diethyl-phenyl-propyl-dihydropyridine 34562-31-7	252-091-3	25- < 50 %	Acute Tox. 4; Oral H302 Acute Tox. 4; Dermal H312 Skin Irrit. 2; Dermal H315 Eye Irrit. 2 H319 Aquatic Chronic 4 H413
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.

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

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

EYE: Irritation, conjunctivitis.

SKIN: Redness, inflammation.

INGESTION: Nausea, vomiting, diarrhea, abdominal pain.

Vapors may cause drowsiness and dizziness.

MSDS-No.: 173280 7386 Activator Page 4 of 14

V005.4

#### 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.

### **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:

Water

#### 5.2. Special hazards arising from the substance or mixture

Vapours may accumulate in low or confined areas, travel considerable distance to source of ignition, and flash back. Oxides of carbon, oxides of nitrogen, irritating organic vapors.

#### 5.3. Advice for firefighters

Wear self-contained breathing apparatus.

#### 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

Remove sources of ignition.

Ensure adequate ventilation.

#### 6.2. Environmental precautions

Do not let product enter drains.

#### 6.3. Methods and material for containment and cleaning up

Wipe up using absorbent material.

Store in a partly filled, closed container until 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.

# 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.

#### 7.3. Specific end use(s)

activator

MSDS-No.: 173280 7386 Activator Page 5 of 14

V005.4

# **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>	V 2	Short term exposure limit category / Remarks	Regulatory list
Propan-2-ol 67-63-0 [PROPAN-2-OL]	500	1.250	Short Term Exposure Limit (STEL):		EH40 WEL
Propan-2-ol 67-63-0 [PROPAN-2-OL]	400	999	Time Weighted Average (TWA):		EH40 WEL

# **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
Propan-2-ol 67-63-0 [ISOPROPYL ALCOHOL]	400		Short Term Exposure Limit (STEL):		IR_OEL
Propan-2-ol 67-63-0 [ISOPROPYL ALCOHOL]	200		Time Weighted Average (TWA):		IR_OEL
Propan-2-ol 67-63-0 [ISOPROPYL ALCOHOL]			Skin designation:	Can be absorbed through the skin.	IR_OEL

# **Predicted No-Effect Concentration (PNEC):**

Name on list	Environmental Compartment	Exposure period	Value				Remarks
			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 food	

MSDS-No.: 173280 7386 Activator Page 6 of 14

V005.4

#### **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 93924-37-9	Workers	dermal	Long term exposure - systemic effects		300 mg/kg bw/day	
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics 93924-37-9	Workers	Inhalation	Long term exposure - systemic effects		2085 mg/m3	
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics 93924-37-9	general population	dermal	Long term exposure - systemic effects		149 mg/kg bw/day	
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics 93924-37-9	general population	oral	Long term exposure - systemic effects		149 mg/kg bw/day	
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics 93924-37-9	general population	Inhalation	Long term exposure - systemic effects		477 mg/m3	
Propan-2-ol 67-63-0	Workers	dermal	Long term exposure - systemic effects		888 mg/kg bw/day	
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 bw/day	
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 bw/day	

#### **Biological Exposure Indices:**

None

# 8.2. Exposure controls:

Respiratory protection:

Do not inhale vapors and fumes.

Use only in well-ventilated areas.

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

Filter type: A (EN 14387)

#### Hand protection:

Chemical-resistant protective gloves (EN 374).

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

nitrile rubber (NBR; >= 0.4 mm thickness)

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

nitrile rubber (NBR;  $\geq$ = 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.

MSDS-No.: 173280 7386 Activator Page 7 of 14

V005.4

Skin protection:

Suitable protective clothing

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

Advices to personal protection equipment:

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

### **SECTION 9: Physical and chemical properties**

### 9.1. Information on basic physical and chemical properties

Appearance liquid clear

yellow, Amber, greenish

Odor Aliphatic

Odour threshold No data available / Not applicable

pH Not applicable
Initial boiling point 82 °C (179.6 °F)
Flash point -5 °C (23 °F)

Decomposition temperature No data available / Not applicable

Vapour pressure 35 mm hg

(20 °C (68 °F))

Density 0,8 g/cm<sup>3</sup>

()
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) Insoluble

Solidification temperature

No data available / Not applicable
Melting point

No data available / Not applicable
Flammability

No data available / Not applicable
Auto-ignition temperature

Explosive limits

No data available / Not applicable
Partition coefficient: n-octanol/water

No data available / Not applicable

Vapor density Heavier than air

Oxidising properties No data available / Not applicable

#### 9.2. Other information

No data available / Not applicable

# **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

No decomposition if used according to specifications. Heat, flames, sparks and other sources of ignition. MSDS-No.: 173280 7386 Activator Page 8 of 14

V005.4

#### 10.5. Incompatible materials

None if used properly.

#### 10.6. Hazardous decomposition products

None if used for intended purpose.

# **SECTION 11: Toxicological information**

#### 11.1. Information on toxicological effects

### General toxicological information:

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

#### Oral toxicity:

Harmful if swallowed.

May be fatal if swallowed and enters airways.

#### Inhalative toxicity:

May cause headache and dizziness.

#### Skin irritation:

Causes skin irritation.

Solvent may remove essential oils from the skin making it susceptible to attack from other chemicals.

#### Eye irritation:

Causes serious eye irritation.

# Acute oral toxicity:

Hazardous components	Value	Value	Route of	Exposure	Species	Method
CAS-No.	type		application	time		
Hydrocarbons, C7, n-	LD50	> 5.840 mg/kg	oral		rat	OECD Guideline 401 (Acute
alkanes, isoalkanes,						Oral Toxicity)
cyclics						
93924-37-9						
Propan-2-ol	LD50	5.840 mg/kg	oral		rat	OECD Guideline 401 (Acute
67-63-0						Oral Toxicity)

# Acute inhalative toxicity:

Hazardous components	Value	Value	Route of	Exposure	Species	Method
CAS-No.	type		application	time		
Hydrocarbons, C7, n-	LC50	> 23,3 mg/l	vapour		rat	OECD Guideline 403 (Acute
alkanes, isoalkanes,						Inhalation Toxicity)
cyclics						
93924-37-9						
Propan-2-ol	LC50	72,6 mg/l		4 h	rat	
67-63-0						

# Acute dermal toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Hydrocarbons, C7, n-	LD50	> 2.920 mg/kg	dermal		rat	OECD Guideline 402 (Acute
alkanes, isoalkanes,						Dermal Toxicity)
cyclics						
93924-37-9						
Propan-2-ol	LD50	12.870 mg/kg	dermal		rabbit	
67-63-0						

MSDS-No.: 173280 7386 Activator Page 9 of 14

V005.4

# Skin corrosion/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
Diethyl-phenyl-propyl- dihydropyridine 34562-31-7	irritating			
Propan-2-ol 67-63-0	slightly irritating	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

# Serious eye damage/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
Diethyl-phenyl-propyl- dihydropyridine 34562-31-7	irritating			
Propan-2-ol 67-63-0	moderately irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)

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

Hazardous components CAS-No.	Result	Test type	Species	Method
Propan-2-ol	not sensitising	Buehler	guinea pig	OECD Guideline 406 (Skin
67-63-0		test		Sensitisation)

# Germ cell mutagenicity:

Hazardous components CAS-No.	Result	Type of study / Route of administration	Metabolic activation / Exposure time	Species	Method
Propan-2-ol 67-63-0	negative with metabolic activation	mammalian cell gene mutation assay	with and without		OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)
Propan-2-ol 67-63-0	negative	intraperitoneal		mouse	OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)

# Carcinogenicity:

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

# Reproductive toxicity:

Hazardous substances CAS-No.	Result / Classification	Species	Exposure time	Species	Method
Propan-2-ol 67-63-0	NOAEL P = 853 mg/kg	One generation study oral: drinking water		rat	OECD Guideline 415 (One- Generation Reproduction Toxicity Study)
	NOAEL P = 500 mg/kg NOAEL F1 = 1.000 mg/kg	Two generation study oral: gavage		rat	OECD Guideline 416 (Two- Generation Reproduction Toxicity Study)

# Repeated dose toxicity

Hazardous components CAS-No.	Result	Route of application	Exposure time / Frequency of treatment	Species	Method
Propan-2-ol 67-63-0		inhalation: vapour	at least 104 w6 h/d, 5 d/w	rat	

MSDS-No.: 173280 7386 Activator Page 10 of 14

V005.4

# **SECTION 12: Ecological information**

### General ecological information:

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

# 12.1. Toxicity

#### **Ecotoxicity:**

Toxic to aquatic life with long lasting effects.

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

Hazardous components	Value	Value	Acute	Exposure	Species	Method
CAS-No.	type		Toxicity	time		
			Study			
Hydrocarbons, C7, n-alkanes,	EC50	3 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline
isoalkanes, cyclics						202 (Daphnia sp.
93924-37-9						Acute
						Immobilisation
						Test)
Hydrocarbons, C7, n-alkanes,	NOEC	0,17 mg/l	chronic	21 d	Daphnia magna	OECD 211
isoalkanes, cyclics			Daphnia			(Daphnia magna,
93924-37-9						Reproduction Test)
Propan-2-ol	LC50	> 9.640 - 10.000 mg/l	Fish	96 h	Pimephales promelas	OECD Guideline
67-63-0						203 (Fish, Acute
						Toxicity Test)
Propan-2-ol	EC50	> 1.000 mg/l	Algae	96 h	Scenedesmus subspicatus (new	OECD Guideline
67-63-0					name: Desmodesmus	201 (Alga, Growth
					subspicatus)	Inhibition Test)
	NOEC	1.000 mg/l	Algae	96 h	Scenedesmus subspicatus (new	OECD Guideline
					name: Desmodesmus	201 (Alga, Growth
					subspicatus)	Inhibition Test)
Propan-2-ol	EC 50	> 1.000 mg/l	Bacteria	3 h		OECD Guideline
67-63-0						209 (Activated
						Sludge, Respiration
						Inhibition Test)
Propan-2-ol	NOEC	30 mg/l	chronic	21 d	Daphnia magna	OECD 211
67-63-0			Daphnia			(Daphnia magna,
						Reproduction Test)

# 12.2. Persistence and degradability

# Persistence and Biodegradability:

No data available.

Hazardous components CAS-No.	Result	Route of application	Degradability	Method
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics 93924-37-9	readily biodegradable	aerobic	98 %	OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)
Propan-2-ol 67-63-0	readily biodegradable	aerobic	70 - 84 %	EU Method C.4-E (Determination of the "Ready" BiodegradabilityClosed Bottle Test)

### 12.3. Bioaccumulative potential / 12.4. Mobility in soil

### **Mobility:**

The product evaporates readily.

### **Bioaccumulative potential:**

No data available.

Hazardous components	LogKow	Bioconcentration	Exposure	Species	Temperature	Method
CAS-No.		factor (BCF)	time			
Propan-2-ol 67-63-0	0,05					OECD Guideline 107 (Partition Coefficient (n- octanol / water), Shake Flask Method)

MSDS-No.: 173280 7386 Activator Page 11 of 14

V005.4

#### 12.5. Results of PBT and vPvB assessment

Hazardous components	PBT/vPvB
CAS-No.	
Hydrocarbons, C7, n-alkanes, isoalkanes,	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
cyclics	Bioaccumulative (vPvB) criteria.
93924-37-9	
Propan-2-ol	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
67-63-0	Bioaccumulative (vPvB) criteria.

### 12.6. Other adverse effects

No data available.

# **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

Product disposal:

Dispose of according to regulations.

Disposal of uncleaned packages:

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

Disposal must be made according to official regulations.

Waste code

14 06 03 - other solvents and solvent mixtures

# **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	FLAMMABLE LIQUID, N.O.S. (Heptanes, Isopropanol)
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

MSDS-No.: 173280 7386 Activator Page 12 of 14

V005.4

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

IMDG not applicable IATA not applicable

# 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 100 % (2010/75/EC)

#### 15.2. Chemical safety assessment

A chemical safety assessment has not been carried out.

MSDS-No.: 173280 7386 Activator Page 13 of 14

V005.4

# **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.

H312 Harmful in contact with skin.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

H411 Toxic to aquatic life with long lasting effects.

H413 May cause long lasting harmful effects to aquatic life.

#### **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):

F - Highly flammable



Xn - Harmful N - Dangerous for the environment



#### Risk phrases:

R11 Highly flammable.

R21/22 Harmful in contact with skin and if swallowed.

R36/38 Irritating to eyes and skin.

R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R65 Harmful: may cause lung damage if swallowed.

R67 Vapours may cause drowsiness and dizziness.

### Safety phrases:

S16 Keep away from sources of ignition - No smoking.

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.

S61 Avoid release to the environment. Refer to special instructions/Safety data sheets.

S62 If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

#### 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:

Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics,

Diethyl-phenyl-propyl-dihydropyridine

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.

MSDS-No.: 173280 7386 Activator Page 14 of 14

V005.4