



**Kemetyl**

# Safety data sheet

According to Regulation (EU) No 2020/878

## SECTION 1 IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING \*

### 1.1. Product identifier

Product name : SHELL AIRFRESHENER ENERGY RELOAD  
Product code : CRX782, AL53D; 9728153

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

Application : SU21 Consumer product. PC3 Air care products for vehicles. Airfreshener.

### 1.3. Details of the supplier of the safety data sheet

Supplier : Kemetyl Nederland BV  
Industrieweg 30  
3762 EK Soest, The Netherlands  
Telephone : +31-35 7604900  
E-mail : msds@kemetyl.com  
Website : www.kemetyl.com

### 1.4. Emergency telephone number

EMERGENCY TELEPHONE NUMBER, for DOCTORS/FIRE BRIGADE/POLICE only:

NL - Telephone : +31-35-6099310

(During office hours only)

## SECTION 2 HAZARDS IDENTIFICATION \*

### 2.1. Classification of the substance or mixture

CLP classification (1272/2008/EC) : Skin irritation, category 2. Eye irritation, category 2. Skin sensitization, category 1. Hazardous to the aquatic environment — Chronic category 2.

Human health hazards : Causes skin irritation. Causes serious eye irritation. May cause an allergic skin reaction.

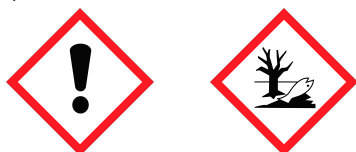
Physical/chemical hazards : Not classified as dangerous according to statutory EC-Directives. Combustible.

Environmental hazards : Toxic to aquatic life with long lasting effects.

### 2.2. Label elements

Label elements (1272/2008/EC):

Hazard pictograms :



Signal word : Warning

H- and P-phrases	: H315	Causes skin irritation.
	H319	Causes serious eye irritation.
	H317	May cause an allergic skin reaction.
	H411	Toxic to aquatic life with long lasting effects.
	P101	If medical advice is needed, have product container or label at hand.
	P102	Keep out of reach of children.
	P273	Avoid release to the environment.
	P280 hands	Wear protective gloves and eye protection.
	eyes	
	P391	Collect spillage.

**Kemetyl**

# Safety data sheet

According to Regulation (EU) No 2020/878

P501 Dispose of contents/container to an official chemical waste depot.

Labelling of packagings where the contents do not exceed 125 ml and it is technically impossible to list all phrases:

Hazard pictograms :



Signal word : Warning

H- and P-phrases :

H317 May cause an allergic skin reaction.

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P280 gloves Wear protective gloves.

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

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

P501 Dispose of contents/container to an official chemical waste depot.

Additional labelling (for all packaging sizes)

: Contains: Linalyl acetate ; Hexyl salicylate ; 3,7-Dimethyloctan-3-ol ; 1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one ; 3,7-Dimethylnona-1,6-dien-3-ol ; Cedryl methyl ketone ; 3R-(3 $\alpha$ ,3 $\beta$ ,6 $\alpha$ ,7 $\beta$ ,8 $\alpha$ )]-octahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl acetate ; 4-Allylanisole ; Cineole ; Methyl 2,4-dihydroxy-3,6-dimethylbenzoate ; 2,4-Dimethylcyclohex-3-ene-1-carbaldehyde .

### 2.3. Other hazards

Other information : Does not contain PBT or vPvB substances in concentrations higher than 0,1%.

## SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

### 3.2. Mixtures

Product description : Mixture.

Information on hazardous substances:

Substance name	Concentration (w/w) (%)	CAS nr.	EC number	Remark	REACH nr.
2,6-Dimethyloct-7-en-2-ol	5 - < 15	18479-58-8	242-362-4		
Linalyl acetate	1 - < 5	115-95-7	204-116-4		
Hexyl salicylate	2,5 - < 5	6259-76-3	228-408-6		
3,7-Dimethyloctan-3-ol	1 - < 5	78-69-3	201-133-9		
1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	1 - < 2,5	54464-57-2	259-174-3		
3,7-Dimethylnona-1,6-dien-3-ol	1 - < 5	10339-55-6	233-732-6		
Cedryl methyl ketone	0,25 - < 1	32388-55-9	251-020-3		
Allyl (cyclohexyloxy)acetate	0,25 - < 1	68901-15-5	272-657-3		
3R-(3 $\alpha$ ,3 $\beta$ ,6 $\alpha$ ,7 $\beta$ ,8 $\alpha$ )]-octahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl acetate	0,25 - < 1	77-54-3	201-036-1		
4-Allylanisole	0,1 - < 1	140-67-0	205-427-8		
Cineole	0,1 - < 1	470-82-6	207-431-5		
Methyl 2,4-dihydroxy-3,6-dimethylbenzoate	0,1 - < 1	4707-47-5	225-193-0		
2,4-Dimethylcyclohex-3-ene-1-carbaldehyde	0,1 - < 1	68039-49-6	268-264-1		

Product name : Shell Airfreshener energy reload

Date of issue : 2022-07-05

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Page 2/17

INFO CARE SDS

**Kemetyl**

# Safety data sheet

According to Regulation (EU) No 2020/878

[3R-(3 $\alpha$ ,3 $\alpha\beta$ ,7 $\beta$ ,8 $\alpha\alpha$ )]-1-(2,3,4,7,8,8a-hexahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl)ethan-1-one	0,025 - < 0,25	469-61-4	207-418-4		
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Substance name	Hazard Class	H-phrases	Pictograms	
2,6-Dimethyloct-7-en-2-ol	Skin Irrit. 2; Eye Irrit. 2	H315; H319	GHS07	
Linalyl acetate	Skin Irrit. 2; Skin Sens. 1B; Eye Irrit. 2	H315; H317; H319	GHS07	
Hexyl salicylate	Skin Irrit. 2; Skin Sens. 1B; Aquatic Acute 1; Aquatic Chronic 1	H315; H317; H400; H410	GHS07; GHS09	M (acute) = 1 M (chronic) = 1
3,7-Dimethyloctan-3-ol	Skin Irrit. 2; Skin Sens. 1B; Eye Irrit. 2	H315; H317; H319	GHS07	
1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	Skin Irrit. 2; Skin Sens. 1B; Aquatic Chronic 1	H315; H317; H410	GHS07; GHS09	M (chronic) = 1
3,7-Dimethylnona-1,6-dien-3-ol	Skin Irrit. 2; Skin Sens. 1B; Eye Irrit. 2	H315; H317; H319	GHS07	
Cedryl methyl ketone	Skin Sens. 1B; Aquatic Acute 1; Aquatic Chronic 1	H317; H400; H410	GHS07; GHS09	M (acute) = 1 M (chronic) = 1
Allyl (cyclohexyloxy)acetate	Acute Tox. 4; Aquatic Acute 1; Aquatic Chronic 1	H302; H400; H410	GHS07; GHS09	M (acute) = 1 M (chronic) = 1
3R-(3 $\alpha$ ,3 $\alpha\beta$ ,6 $\alpha$ ,7 $\beta$ ,8 $\alpha\alpha$ )]-octahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl acetate	Skin Sens. 1B; Aquatic Acute 1; Aquatic Chronic 1	H317; H400; H410	GHS07; GHS09	M (acute) = 1
4-Allylanisole	Acute Tox. 4; Skin Irrit. 2; Skin Sens. 1B; Muta. 2; Carc. 2; Aquatic Chronic 3	H302; H315; H317; H341; H351; H412	GHS07; GHS08	
Cineole	Flam. Liq. 3; Skin Sens. 1B	H226; H317	GHS02; GHS07	
Methyl 2,4-dihydroxy-3,6-dimethylbenzoate	Skin Sens. 1B	H317	GHS07	
2,4-Dimethylcyclohex-3-ene-1-carbaldehyde	Skin Irrit. 2; Skin Sens. 1B; Eye Irrit. 2; Aquatic Chronic 2	H315; H317; H319; H411	GHS07; GHS09	
[3R-(3 $\alpha$ ,3 $\alpha\beta$ ,7 $\beta$ ,8 $\alpha\alpha$ )]-1-(2,3,4,7,8,8a-hexahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl)ethan-1-one	Asp. Tox. 1; Aquatic Acute 1; Aquatic Chronic 1	H304; H400; H410	GHS08; GHS09	M (acute) = 10 M (chronic) = 10

Reference is made to chapter 16 for full text of each relevant H phrase.

## SECTION 4 FIRST-AID MEASURES

### 4.1. Description of first aid measures

#### First aid measures

- Inhalation : Not applicable under normal conditions of use. Consult a doctor if victim feels unwell.
- Skin contact : Take off contaminated clothing. Wash off skin with plenty of water and soap before product dries up. Consult a doctor if irritation occurs.
- Eye contact : Wash out with (lukewarm) water. Remove contact lenses. Consult a doctor.
- Ingestion : Do not induce vomiting. Do rinse the mouth. Give one glass of water. Never give anything by mouth to an unconscious person. Consult a doctor if victim feels unwell.

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



**Kemetyl**

# Safety data sheet

According to Regulation (EU) No 2020/878

## Effects and symptoms

- Inhalation : No specific effects and/or symptoms are known.  
Skin contact : Irritant. May cause redness and irritation, sensitisation. May produce an allergic reaction. May cause dry skin.  
Eye contact : Irritant. May cause redness and pain.  
Ingestion : May cause a feeling of sickness, vomiting and diarrhoea.

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

Note to physicians : None known.

## SECTION 5 FIRE-FIGHTING MEASURES

### 5.1. Extinguishing media

#### Extinguishing media

- Suitable : Carbon dioxide (CO<sub>2</sub>). Foam. Dry chemical. Water fog.  
Not suitable : Water jet. Use of heavy stream of water may spread fire.

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

- Special exposure hazards : None known.  
Hazardous thermal decomposition products : Carbon monoxide may be evolved if incomplete combustion occurs.

### 5.3. Advice for firefighters

Special protective equipment for fire-fighters : Use adequate respiratory equipment in case of insufficient ventilation.

## SECTION 6 ACCIDENTAL RELEASE MEASURES

### 6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions : Danger of slipping. Clean up spills immediately. Wear shoes with non-slip soles. Avoid contact with spilled or released material. Vapours are heavier than air. Build up (of gasses) in low areas involves risk of suffocation.

### 6.2. Environmental precautions

Environmental precautions : Avoid release of product into sewers, surface water and/or ground water. In case of large spills: contain with dike. Waste product should not be allowed to contaminate soil or water.  
Other information : Notify authorities if any exposure to the general public or the environment occurs or is likely to occur.

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

Methods for cleaning up : Collect spilled material in containers. Dispose at an authorised waste collection point. Wash away remainder with plenty of water and soap.

### 6.4. Reference to other sections

Reference to other sections : See also section 8.

## SECTION 7 HANDLING AND STORAGE

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### 7.1. Precautions for safe handling



**Kemetyl**

# Safety data sheet

According to Regulation (EU) No 2020/878

Handling : Handle in accordance with good occupational hygiene and safety practices in well-ventilated areas. Keep away from sources of ignition — No smoking. Avoid contact with skin and eyes. Avoid splashing. Wear protective clothing.

## 7.2. Conditions for safe storage, including any incompatibilities

Storage : Keep frost-free, in a cool, dry and well-ventilated place. Keep away from oxidizing agents.  
Recommended packaging : Keep only in the original container.  
Non recommended packaging : None known.

## 7.3. Specific end use(s)

Use : Use only as directed.

## SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION \*

### 8.1. Control parameters

Occupational exposure limits : Occupational exposure limits have not been established for this product. Derived no-effect levels (DNEL) have not been established for this product. Predicted no-effect concentrations (PNEC) have not been established for this product.

Derived no-effect level (DNEL) for workers:

Chemical name	Route of exposure	DNEL, short-term		DNEL, long-term	
		Local effect	Systemic effect	Local effect	Systemic effect
2,6-Dimethyloct-7-en-2-ol	Dermal				7 mg/kg bw/day
	Inhalation				24.7 mg/m3
Linalyl acetate	Dermal	0,2362 mg/kg bw		0,2362 mg/kg bw/day	2,5 mg/kg bw/day
	Inhalation				2,75 mg/m3
Hexyl salicylate	Dermal	0,885 mg/kg bw		0,885 mg/kg bw/day	6,4 mg/kg bw/day
	Inhalation				1.7 mg/m3
3,7-Dimethyloctan-3-ol	Inhalation				11,14 mg/m3
	Dermal			0,190 mg/kg bw/day	3,16 mg/kg bw/day
1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphtyl)ethan-1-one	Inhalation				30 mg/m3
	Dermal			0.648 mg/kg bw/day	28.7 mg/kg bw/day
3,7-Dimethylnona-1,6-dien-3-ol	Inhalation		18 mg/m3		3 mg/m3
	Dermal	1,6 mg/kg bw	5,5 mg/kg bw	1,6 mg/kg bw/day	2,7 mg/kg bw/day
Cedryl methyl ketone	Inhalation				1,17 mg/m3
	Dermal				0,333 mg/kg bw/day
Allyl (cyclohexyloxy)acetate	Inhalation				3,16 mg/m3
	Dermal				0,448 mg/kg bw/day
3R-(3α,3αβ,6α,7β,8α)]-octahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl acetate	Inhalation				0.639 mg/m3
	Dermal				0.091 mg/kg bw/day
Cineole	Inhalation				7,05 mg/m3
	Dermal				2 mg/kg bw/day



# Safety data sheet

According to Regulation (EU) No 2020/878

**Kemetyl**

Methyl 2,4-dihydroxy-3,6-dimethylbenzoate	Dermal			2,5 mg/kg bw/day	
2,4-Dimethylcyclohex-3-ene-1-carbaldehyde	Inhalation				0,44 mg/m3
	Dermal				0,125 mg/kg bw/day

Derived no-effect level (DNEL) for consumers:

Chemical name	Route of exposure	DNEL, short-term		DNEL, long-term	
		Local effect	Systemic effect	Local effect	Systemic effect
2,6-Dimethyloct-7-en-2-ol	Dermal				2.5 mg/kg bw/day
	Inhalation				4.35 mg/m3
	Oral				2.5 mg/kg bw/day
Linalyl acetate	Dermal	0,2362 mg/kg bw		0,2362 mg/kg bw/day	1,25 mg/kg bw/day
	Inhalation				0,68 mg/m3
	Oral				0,2 mg/kg bw/day
Hexyl salicylate	Dermal	0.4425 mg/kg bw		0,4425 mg/kg bw/day	3,2 mg/kg bw/day
	Inhalation				0,4 mg/m3
	Oral				0,3 mg/kg bw/day
3,7-Dimethyloctan-3-ol	Inhalation				2,75 mg/m3
	Dermal			0,190 mg/kg bw/day	1,58 mg/kg bw/day
	Oral				1,58 mg/kg bw/day
1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphtyl)ethan-1-one	Inhalation				9 mg/m3
	Dermal			0.380 mg/kg bw/day	17.2 mg/kg bw/day
	Oral				3 mg/kg bw/day
3,7-Dimethylnona-1,6-dien-3-ol	Inhalation		4,4 mg/m3		0,74 mg/m3
	Dermal	1,6 mg/kg bw	2,7 mg/kg bw	1,6 mg/kg bw/day	1,4 mg/kg bw/day
	Oral		1,3 mg/kg bw		0,2 mg/kg bw/day
Cedryl methyl ketone	Inhalation				0,29 mg/m3
	Dermal				0,167 mg/kg bw/day
	Oral				0,167 mg/kg bw/day
Allyl (cyclohexyloxy)acetate	Inhalation				0,557 mg/m3
	Dermal				0,16 mg/kg bw/day
	Oral				0,16 mg/kg bw/day
3R-(3 $\alpha$ ,3 $\beta$ ,6 $\alpha$ ,7 $\beta$ ,8 $\alpha$ )]-octahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl acetate	Dermal				0.181 mg/kg bw/day
	Oral				0.091 mg/kg bw/day
Cineole	Inhalation				0.158 mg/m3
	Inhalation				1,74 mg/m3
	Dermal				1 mg/kg bw/day
	Oral				600 mg/kg bw/day
Methyl 2,4-dihydroxy-3,6-dimethylbenzoate	Dermal			1,25 mg/kg bw/day	
2,4-Dimethylcyclohex-3-ene-1-carbaldehyde	Inhalation				0,108 mg/m3
	Dermal				0,062 mg/kg bw/day
	Oral				0,062 mg/kg bw/day

Predicted no-effect concentration (PNEC):



**Kemetyl**

# Safety data sheet

According to Regulation (EU) No 2020/878

Chemical name	Route of exposure	Fresh water	Marine water	
2,6-Dimethyloct-7-en-2-ol	Water	0,0278 mg/l	0,0027 mg/l	
	Sediment	0,594 mg/kg	0,0594 mg/kg	
	Intermittent water			0,278 mg/l
	STP			10 mg/l
	Soil			0,103 mg/kg
Linalyl acetate	Oral			111 mg/kg food
	Water	0,011 mg/l	0,001 mg/l	
	Sediment	0,609 mg/kg	0,061 mg/kg	
	Intermittent water			0,11 mg/l
	STP			1 mg/l
Hexyl salicylate	Soil			0,115 mg/kg
	Water	0 mg/l	0 mg/l	
	Sediment	0,272 mg/kg	0,027 mg/kg	
	Intermittent water			0,0036 mg/l
	STP			10 mg/l
3,7-Dimethyloctan-3-ol	Soil			0,054 mg/kg
	Water	0.009 mg/l	0.001 mg/l	
	Sediment	0.082 mg/kg	0.008 mg/kg	
	Intermittent water			0,089 mg/l
	STP			450 mg/l
1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	Soil			0.011 mg/kg
	Water	0.0044 mg/l	0.00044 mg/l	
	Sediment	3.73 mg/kg	0.75 mg/kg	
	STP			10 mg/l
	Soil			2.7 mg/kg
3,7-Dimethylnona-1,6-dien-3-ol	Oral			26.7 mg/kg food
	Water	0,023 mg/l	0,0023 mg/l	
	Sediment	0,223 mg/kg	0,0223 mg/kg	
	Intermittent water			0,23 mg/l
	STP			10 mg/l
Cedryl methyl ketone	Soil			0,031 mg/kg
	Oral			8,53 mg/kg food
	Water	0.00174 mg/l	0.000174 mg/l	
	Sediment	24.4 mg/kg	2.44 mg/kg	
	STP			10 mg/l
Allyl (cyclohexyloxy)acetate	Soil			4.87 mg/kg
	Water	0,00205 mg/l	0,000205 mg/l	
	Sediment	0,0387 mg/kg	0,00387 mg/kg	
	STP			0,3 mg/l
	Soil			0,375 mg/kg
3R-(3 $\alpha$ ,3 $\beta$ ,6 $\alpha$ ,7 $\beta$ ,8 $\alpha$ )]-octahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl acetate	Water	0 mg/l	0 mg/l	
	Sediment	0.011 mg/kg	0.001 mg/kg	
	STP			0.003 mg/l
	Soil			0.009 mg/kg
	Water	0,057 mg/l	0,0057 mg/l	
Cineole	Sediment	1,425 mg/kg	0,1425 mg/kg	
	Intermittent water			0,57 mg/l
	STP			10 mg/l
	Soil			0,25 mg/kg
	Oral			40 mg/kg food



**Kemetyl**

# Safety data sheet

According to Regulation (EU) No 2020/878

Methyl 2,4-dihydroxy-3,6-dimethylbenzoate	Water	0,0033 mg/l	0,00033 mg/l	
	Sediment STP Soil	0,089 mg/kg	0,0089 mg/kg	10 mg/l 0,016 mg/kg
2,4-Dimethylcyclohex-3-ene-1-carbaldehyde	Water	0,0075 mg/l	0,00075 mg/l	
	Sediment Intermittent water STP Soil	0,226 mg/kg	0,0226 mg/kg	0,075 mg/l 10 mg/l 0,0408 mg/kg

## 8.2. Exposure controls

Engineering measures : Comply with standard precautionary measures for working with chemicals.  
Hygienic measures : When using do not eat, drink or smoke.

Personal protective equipment:

The efficiency of personal protective equipment depends among other things on temperature and degree of ventilation. Always get professional advice for the particular local situation.



- Body protection : Wear appropriate protective clothing, overalls or suit, and similar boots in accordance with EN 365/367 resp. 345. Suitable material: laminated film. Indication of permeation breakthrough time: not known.
- Respiratory protection : Take care of sufficient ventilation. Wear suitable respiratory protection in case of large scale exposure. Suitable: gas filter type A (brown), class I or higher on e.g. a facemask in accordance with EN 140.
- Hand protection : Wear appropriate safety gloves in accordance with EN 374. Suitable material: laminated film. ± 0,5 mm. Indication of permeation breakthrough time: not known.
- Eye protection : Wear appropriate safety glasses with side shields, in accordance with EN 166, when there is danger of possible eye contact.

## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

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

Physical state	: Liquid.	Impregnated material.
Colour	: Light yellow.	
Odour	: Perfumed.	
Odour threshold	: Not known.	
pH	: Not applicable.	Waterfree product.
Solubility in water	: Not soluble.	
Partition coefficient (n-octanol/water)	: Not known.	Not measured. Not relevant for mixtures.
Flash point	: 96 °C	Closed cup.
Flammability (solid, gas)	: Not applicable.	Liquid. See flashpoint.
Auto ignition temperature	: > 225 °C	
Boiling point/boiling range	: > 100 °C	
Melting point/melting range	: < 0 °C	
Explosive properties	: Not an explosive.	
Explosion limits (% in air)	: Not known.	Lower explosion limit in air (%): 0,7 ( Linalyl acetate ) Upper explosion limit in air (%): 4,3 ( Linalyl acetate )





**Kemetyl**

# Safety data sheet

According to Regulation (EU) No 2020/878

Oxidising properties	: Not applicable.	Does not contain oxidizing substances.
Decomposition temperature	: Not applicable.	
Viscosity (20°C)	: Not known.	
Viscosity (40°C)	: Not relevant.	The product contains < 10% substances having an aspiration hazard.
Vapour pressure (20°C)	: Not known.	
Relative vapour density	: > 1	(air = 1)
Relative density (20°C)	: 0,98 g/ml	
Particle characteristics	: Not applicable.	Liquid.

## 9.2. Other information

Other information : Not relevant.

## SECTION 10 STABILITY AND REACTIVITY

### 10.1. Reactivity

Reactivity : See sub-sections below.

### 10.2. Chemical stability

Stability : Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

Reactivity : No other hazardous reactions known.

### 10.4. Conditions to avoid

Conditions to avoid : See section 7.

### 10.5. Incompatible materials

Materials to avoid : Keep away from oxidizing agents.

### 10.6. Hazardous decomposition products

Hazardous decomposition products : Not known.

## SECTION 11 TOXICOLOGICAL INFORMATION

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

No toxicological research has been carried out on this product.

Inhalation

Acute toxicity	: Calculated LC50: > 10 mg/l. Ingredients of unknown toxicity: 16 %. ATE: > 5 mg/l. Low toxicity. Not classified - based on available data, the classification criteria are not met.
Corrosion/irritation	: Not classified - based on available data, the classification criteria are not met.
Sensitisation	: Does not contain substances classified as respiratory sensitiser. Not classified - based on available data, the classification criteria are not met.
Carcinogenicity	: Not expected to be carcinogenic. Not classified - based on available data, the classification criteria are not met.
Mutagenicity	: Not expected to be mutagenic. Not classified - based on available data, the classification criteria are not met.

Skin contact

Acute toxicity	: Calculated LD50: > 5000 mg/kg.bw. Ingredients of unknown toxicity: < 1 %. ATE: > 2000 mg/kg.bw. Low toxicity. Not classified - based on available data, the classification criteria are not met.
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**Kemetyl**

# Safety data sheet

According to Regulation (EU) No 2020/878

Corrosion/irritation : Irritant. May cause redness. Prolonged contact may dry out and defat the skin.  
 Sensitisation : May cause sensitisation by skin contact. May produce an allergic reaction.  
 Mutagenicity : Does not contain mutagenic substances. Not classified - based on available data, the classification criteria are not met.

**Eye contact**

Corrosion/irritation : Irritant.

**Ingestion**

Acute toxicity : Calculated LD50: > 5000 mg/kg.bw. Ingredients of unknown toxicity: < 1 %. ATE: > 2000 mg/kg.bw. Low toxicity. Not classified - based on available data, the classification criteria are not met.  
 Aspiration : Not expected to be an aspiration hazard. Contains a substance/substances with an aspiration hazard. Not classified - based on available data, the classification criteria are not met.  
 Corrosion/irritation : May cause a feeling of sickness, vomiting and diarrhoea.  
 Carcinogenicity : Not expected to be carcinogenic. Not classified - based on available data, the classification criteria are not met.  
 Mutagenicity : Not expected to be mutagenic. Not classified - based on available data, the classification criteria are not met.  
 Reprotoxicity : Development: Not expected to be reprotoxic. Development: Not classified - Based on available data, the classification criteria are not met. Fertility: not expected to be reprotoxic. Fertility: Not classified - based on available data, the classification criteria are not met.

**Toxicological information:**

Chemical name	Property		Method	Test animal
2,6-Dimethyloct-7-en-2-ol	NOAEL (development) - estimate	1000 mg/kg.d	Read across	Rat
	Mutagenicity	Not mutagenic	OECD 471	
	Genotoxicity - in vitro	Not genotoxic	OECD 476	
	NOAEL (oral) - estimate	500 mg/kg bw/d	Read across	Rat
	LD50 (oral)	3600 mg/kg bw	-----	Rat
	Skin sensitisation	Not sensitizing		
	Skin irritation	Slightly irritant	-----	Rabbit
	Eye irritation	Moderately irritant	OECD 405	Rabbit
	LD50 (dermal)	> 5000 mg/kg bw	-----	Rabbit
	Linalyl acetate	Outdoor cleaners (excludes stone, concrete and similar surfaces)	1000 mg/kg bw/d	OECD 414
LD50 (oral)		13934 mg/kg bw	-----	Rat
LC50 (inhalation)		> 2740 mg/m3	-----	Mouse
Skin irritation		Non-irritant	-----	Human
Skin irritation		Irritant	OECD 404	Rabbit
Eye irritation		Irritant	OECD 405	Rabbit
NOAEL (oral) - estimate		160 mg/kg bw/d	OECD 407	Rat
NOAEL (dermal)		250 mg/kg bw/d	OECD 411	Rat
Mutagenicity		Not mutagenic	OECD 471	Salmonella typhimurium
Genotoxicity - in vitro		Not genotoxic	OECD 476	Mouse
Genotoxicity - in vivo		Not genotoxic	OECD 474	Mouse
NOAEL (development, oral)		> 1000 mg/kg bw/d	OECD 414	Rat
LC50 (inhalation) - estimate		> 5000 mg/m3	-----	Rat
Skin sensitisation		Sensitizing.	OECD 406	Guinea pig
Hexyl salicylate	LD50 (oral)	> 5000 mg/kg bw	OECD 401	Rat
	NOAEL (inhalation)	249 mg/m3	OECD 412	Rat



**Kemetyl**

# Safety data sheet

According to Regulation (EU) No 2020/878

	LD50 (dermal)	> 5000 mg/kg bw	OECD 402	Rabbit
	NOAEL (oral) - estimate	50 mg/kg bw/d	Read across	
	Mutagenicity	Negative	OECD 471	Salmonella typhimurium
	Genotoxicity - in vitro	Not genotoxic	OECD 476	Chinese Hamster
	Genotoxicity - in vivo	Not genotoxic	-----	Mouse
	NOAEL (development) - estimate	Not teratogenic	Read across	
	NOAEL (fertility) - estimate	Not reprotoxic	Read across	
	Eye irritation	Non-irritant	OECD 405	Rabbit
	Skin irritation	Moderately irritant	OECD 404	Rabbit
3,7-Dimethyloctan-3-ol	LD50 (oral)	8270 mg/kg bw		Rat
	LD50 (dermal)	> 5000 mg/kg bw		Rabbit
	Mutagenicity	Negative	OECD 471	Salmonella typhimurium
	Genotoxicity - in vitro	Not genotoxic	OECD 473	
	NOAEL (oral)	316 mg/kg bw/d	OECD 408	Rat
	NOAEL (dermal) - estimate	250 mg/kg bw/d	Read across	Rat
	NOAEL (fertility) - estimate	365 mg/kg.d	Read across	Rat
	NOAEL (development, oral)	1000 mg/kg bw/d	OECD 414	Rat
	Skin irritation	Irritant		Rabbit
	Eye irritation	Non-irritant		Rabbit
	LC50 (inhalation) - estimate	> 5000 mg/m3		Rat
	Skin sensitisation	Sensitizing.	OECD 429	Mouse
1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	Skin irritation	Non-irritant	-----	Rabbit
	Skin sensitisation	6825 ug/cm2	OECD 429	Mouse
	LD50 (oral)	> 5000 mg/kg bw	-----	Rat
	LD50 (dermal)	> 5000 mg/kg bw	-----	Rat
	Mutagenicity	Not mutagenic	OECD 471	-----
	NOAEL (development, oral)	480 mg/kg bw/d	OECD 414	Rat
	LC50 (inhalation) - estimate	> 22360 mg/m3	Read across	
3,7-Dimethylnona-1,6-dien-3-ol	LD50 (oral)	5000 mg/kg bw	-----	Rat
	LD50 (dermal)	> 5000 mg/kg bw	-----	Rabbit
	NOAEL (oral) - estimate	117 mg/kg bw/d	Read across	Rat
	NOAEL (dermal) - estimate	250 mg/kg bw/d	Read across	Rat
	Mutagenicity	Not mutagenic	OECD 471	Salmonella typhimurium
	Genotoxicity - estimate	Not genotoxic	Read across	
	Skin irritation	Irritant	-----	Rabbit
	Eye irritation	Irritant	-----	Rabbit
Cedryl methyl ketone	NOAEL (fertility, oral)	50 mg/kg bw/d	-----	Rat
	NOAEL (development, oral)	100 mg/kg bw/d	-----	Rat
	LD50 (dermal)	> 2000 mg/kg bw	-----	Rabbit
	LD50 (oral)	5000 mg/kg bw	-----	Rat



# Safety data sheet

According to Regulation (EU) No 2020/878

## Kemetyl

3R-(3α,3aβ,6α,7β,8αα)]-octahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl acetate	LD50 (oral)	44750 mg/kg bw	OECD 401	Rat
	LC50 (inhalation)	12000 mg/m <sup>3</sup>		-----
	Mutagenicity	Negative	OECD 471	Salmonella typhimurium
	Skin irritation	Non-irritant	OECD 439	
	Eye irritation	Non-irritant	OECD 405	Rabbit
	LD50 (dermal)	> 5000 mg/kg bw		Rabbit
	Genotoxicity - in vitro	Not genotoxic	OECD 487	
4-Allylanisole	NOAEL (development, oral)	> 50 mg/kg bw/d	-----	Rat
	Skin irritation	Moderately irritant		Rabbit
	Skin sensitisation	Sensitizing.	OECD 442D	
	Mutagenicity	Not mutagenic	OECD 471	Salmonella typhimurium
	NOAEL (oral)	75 mg/kg bw/d	-----	Rat
	NOAEL (fertility, oral)	> 37,5 mg/kg bw/d	-----	Rat
	LD50 (oral)	1230 mg/kg bw	-----	Rat
	LD50 (dermal)	> 5000 mg/kg bw		Rabbit
	Skin irritation	Irritant	OECD 439	Human
Cineole	LD50 (oral)	2480 mg/kg bw	-----	Rat
	LD50 (dermal)	> 5000 mg/kg bw		Rabbit
	NOAEL (oral)	600 mg/kg bw/d	OECD 407	Rat
	Genotoxicity - in vitro	Not genotoxic		
	Mutagenicity	Not mutagenic		Salmonella typhimurium
	NOAEL (fertility, oral)	> 600 mg/kg bw/d	OECD 421	Rat
	Skin irritation	Non-irritant		
	LD50 (dermal) - estimate	> 2000 mg/kg bw	Read across	
Methyl 2,4-dihydroxy-3,6-dimethylbenzoate	LD50 (oral)	> 5000 mg/kg bw	OECD 401	Rat
	LD50 (dermal)	> 5000 mg/kg bw	OECD 402	Rat
	Skin irritation	Non-irritant		
	Eye irritation	Non-irritant	OECD 405	Rabbit
2,4-Dimethylcyclohex-3-ene-1-carbaldehyde	Skin sensitisation	5900 ug/cm <sup>2</sup>		
	LD50 (oral)	> 2000 mg/kg bw		Rat
	LD50 (dermal)	> 2000 mg/kg bw		Rabbit
	Mutagenicity	Not mutagenic		Salmonella typhimurium

### 11.2. Information on other hazards

Endocrine disrupting properties : Not applicable.  
Other information : Not applicable.

## SECTION 12 ECOLOGICAL INFORMATION

\*

### 12.1. Toxicity

No ecotoxicological research has been carried out on this product.

Ecotoxicity : Toxic to aquatic organisms. Calculated LC50 (fish): 8 mg/l. Calculated EC50 (waterflea): 3 mg/l.  
Contains 0 % of components with unknown hazards to the aquatic environment.

### 12.2. Persistence and degradability

Persistence – degradability : May cause long-term adverse effects in the aquatic environment.



Kemetyl

# Safety data sheet

According to Regulation (EU) No 2020/878

## 12.3. Bioaccumulative potential

Bioaccumulative potential : Contains bioaccumulating substances.

## 12.4. Mobility in soil

Mobility : Adsorbs to soil and has low mobility.

## 12.5. Results of PBT and vPvB assessment

PBT/vPvB assessment : Does not contain PBT or vPvB substances in concentrations higher than 0,1%.

## 12.6. Endocrine disrupting properties

Endocrine disrupting properties : Not applicable.

## 12.7. Other adverse effects

Other adverse effects : Not applicable.

Ecological information:

Chemical name	Property		Method	Test animal
Hexyl salicylate	EC50 (waterflea)	0,357 mg/l	OECD 202	Daphnia magna
	IC50 (alga)	0,61 mg/l	OECD 201	Desmodesmus subspicatus
	LC50 (fish) - estimate	1,34 mg/l	-----	Brachydanio rerio
	Ultimate aerobic biodegradation (%)	91 %	OECD 301 F	
	NOEC (waterflea) - acute	0,140 mg/l	OECD 202	Daphnia magna
	Log P(ow)	5,5000		
1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	EC50 (waterflea)	1,38 mg/l	OECD 202	-----
	IC50 (alga)	> 2,6 mg/l	OECD 201	-----
	LC50 (fish)	1,3 mg/l	OECD 203	-----
	Log P(ow)	5,23		
	BCF	600		
Cedryl methyl ketone	IC50 (alga)	2,80 mg/l	OECD 201	Algae
	EC50 (waterflea)	0,86 mg/l	OECD 202	Daphnia magna
	LC50 (fish)	2,3 mg/l	OECD 203	Pimephales promelas
	NOEC (waterflea) - chronic	0,087 mg/l.d	OECD 211	Daphnia magna
	Log P(ow)	5,6		
Allyl (cyclohexyloxy)acetate	EC50 (waterflea)	11,3 mg/l	OECD 202	Daphnia magna
	NOEC (waterflea) - chronic	3,2 mg/l.d	OECD 202	Daphnia magna
	Ultimate aerobic biodegradation (%)	24 %	OECD 301 D	
	IC50 (alga)	69,2 mg/l	OECD 201	Pseudokirchnerella subcapitata
	LC50 (fish)	0,205 mg/l	OECD 203	Brachydanio rerio
3R-(3 $\alpha$ ,3 $\beta$ ,6 $\alpha$ ,7 $\beta$ ,8 $\alpha$ )]-octahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl acetate	Log P(ow)	2,64		
	LC50 (fish)	15,61 mg/l	OECD 203	Brachydanio rerio
	EC50 (waterflea)	0,33 mg/l	OECD 202	Daphnia magna



**Kemetyl**

# Safety data sheet

According to Regulation (EU) No 2020/878

[3R-(3α,3aβ,7β,8aα)]-1-(2,3,4,7,8,8a-hexahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl)ethan-1-one	LC50 (alga)	> 0,31 mg/l	OECD 201	Pseudokirchnerella subcapitata
	Ultimate aerobic biodegradation (%)	73 %	OECD 301 D	
	Log P(ow)	6		
	LC50 (fish) - estimate	0,055 mg/l	-----	-----
	EC50 (waterflea) - estimate	> 0,01 mg/l		
	Log P(ow)	6,38		

## SECTION 13 DISPOSAL CONSIDERATIONS

### 13.1. Waste treatment methods

- Product residues : Do not dispose empty pack with waste produced by households. Containers may be recycled. Treat product residues, impregnated wipes and non-empty pack as hazardous waste.
- Additional warning : None.
- Waste water discharge : Do not dispose of into the environment, drains, sewers or water courses.
- European waste catalogue : Dispose hazardous waste in accordance with Directive 91/689/EEC under acknowledgement of a waste code according to Commission Decision 2000/532/EC to an official chemical waste depot.
- Local legislation : Disposal should be in accordance with applicable regional, national, and local laws and regulations. Local regulations may be more stringent than regional or national requirements and must be complied with.

## SECTION 14 TRANSPORT INFORMATION

### 14.1. UN number or ID number

UN nr. : UN 3082

### 14.2. UN proper shipping name

- Transport name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ( Hexyl salicylate ; 1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphtyl)ethan-1-one )
- Transport name (IMDG, IATA) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ( Hexyl salicylate ; 1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphtyl)ethan-1-one )

### 14.3/14.4/14.5. Transport hazard class(es)/Packing group/Environmental hazards

ADR/RID/ADN (road/railway/inland waterways)

- Class : 9
- Classification code : M6
- Packaging group : III
- Danger label : 9 + the "environmentally hazardous substance" mark.
- Tunnel restriction code : (-)





**Kemetyl**

# Safety data sheet

According to Regulation (EU) No 2020/878

Other information : Not intended for carriage by tank-vessels on inland waterways. This product is not regulated as a dangerous good when transported in sizes of  $\leq 5$  L or  $\leq 5$  kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8 (Special provisions 375).

## IMDG (sea)

Class : 9  
Packaging group : III  
EmS (fire / spill) : F - A / S - F  
Marine pollutant : Yes  
Other information : This product is not regulated as a dangerous good when transported in sizes of  $\leq 5$  L or  $\leq 5$  kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8 (IMDG code 37-14, 2.10.2.7).

## IATA (air)

Class : 9  
ERG code : 9L  
Packaging group : III

### 14.6. Special precautions for user

Other information : Country specific variations may apply. It is possible that a "Limited Quantity" exemption applies to the transport of this product.

### 14.7. Maritime transport in bulk according to IMO instruments

Marpol : Not intended to be carried in bulk according to International Maritime Organisation (IMO) instruments. Packaged liquids are not considered bulk.

## SECTION 15 REGULATORY INFORMATION

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

Community regulations : Regulation (EU) No 2020/878 (REACH), Regulation (EC) No 1272/2008 (CLP) and other regulations. Directive 2008/98/EC (waste).

### 15.2. Chemical safety assessment

Chemical safety assessment : Not applicable.

## SECTION 16 OTHER INFORMATION

### 16.1. Other information

The information in this safety data sheet is compiled in compliance with Regulation (EU) No 2020/878 dated 18 June 2020 and accurate to the best of our knowledge and experience at the date of issue specified. It is the user's obligation to use this product safely and to comply with all applicable laws and regulations concerning the use of the product. This safety data sheet complements the technical information sheets but does not replace them and offers no warranty with regard to product properties.

Users are also forewarned for any hazards involved when the product is used for other purposes than those for which it is designed.

Changed or new information with regard to the previous release is indicated with an asterisk (\*).

List of abbreviations and acronyms that could be (but not necessarily are) used in this safety data sheet:

ADR : European Agreement concerning the International Carriage of Dangerous Goods by Road  
ATE : Acute Toxicity Estimate  
CLP : Classification, Labeling & Packaging



**Kemetyl**

# Safety data sheet

According to Regulation (EU) No 2020/878

CMR	: Carcinogenic, Mutagenic or toxic for Reproduction
EEC	: European Economic Community
GHS	: Globally Harmonized System of Classification and Labelling of Chemicals
IATA	: International Air Transport Association
IBC code	: International Bulk Chemical Code
IMDG	: International Maritime Dangerous Goods Code
LD50/LC50	: Lethal Dose/Concentration for 50% of a population
MAC	: Maximum Allowable Concentration
MARPOL	: International Convention for the Prevention of Pollution From Ships
NO(A)EL	: No Observed (Adverse) Effect Level
OECD	: Organisation for Economic Co-operation and Development
PBT	: Persistent, Bioaccumulative and Toxic
PC	: Chemical product category
PT	: Product type
REACH	: Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	: Regulations concerning the International Carriage of Dangerous Goods by Rail
STP	: Sewage Treatment Plant
SU	: Sector of Use
TWA/STEL	: Time-Weighted Average/Short Term Exposure Limit
UN	: United Nations
UFI	: Unique formula identifier
VOC	: Volatile Organic Compounds
vPvB	: Very Persistent and Very Bioaccumulative

Key data used to compile the Safety Data Sheet are from, but not limited to, one or more sources of information e.g. toxicological data from material suppliers, CONCAWE, IFRA, CESIO, Regulation EG 1272/2008, etc.

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008:

Skin Irrit. 2	: Calculation method.
Eye Irrit. 2	: Calculation method.
Skin Sens. 1/1A/1B	: Calculation method.
Aquatic Chronic 2	: Calculation method.

Full text of hazard classes mentioned in section 3:

Flam. Liq. 3	: Flammable liquid, category 3.
Acute Tox. 4	: Acute toxicity, category 4.
Skin Irrit. 2	: Skin irritation, category 2.
Eye Irrit. 2	: Eye irritation, category 2.
Skin Sens. 1/1A/1B	: Skin sensitization, category 1/1A/1B.
Muta. 2	: Germ cell mutagenicity, Hazard Category 2.
Carc. 2	: Carcinogen, category 2.
Asp. Tox. 1	: Aspiration hazard, category 1.
Aquatic Chronic 1	: Hazardous to the aquatic environment — Chronic category 1.
Aquatic Chronic 2	: Hazardous to the aquatic environment — Chronic category 2.
Aquatic Chronic 3	: Hazardous to the aquatic environment — Chronic category 3.
Aquatic Acute 1	: Hazardous to the aquatic environment — Acute category 1.

Full text of H-phrases mentioned in section 3:

H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H341	Suspected of causing genetic defects.
H351	Suspected of causing cancer.
H400	Very toxic to aquatic life.





**Kemetyl**

# Safety data sheet

According to Regulation (EU) No 2020/878

H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Advice on any training appropriate for workers: none.

Number format : "," used as decimal separator.

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End of safety data sheet.

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