Kemetyl

Safety data sheet

According to Regulation (EU) No 2015/830

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

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

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

1.3. Details of the supplier of the safety data sheet

Supplier : Kemetyl Accessoires (UK) Ltd
Office 410 Index House
SL5 7ET Ascot, Great Britain
Telephone : +44-1344 371481
Fax : +44-20-8614 6576
E-mail : msds@kemetyl.com
Website : http://www.kemetyl.com

1.4. Emergency telephone number

EMERGENCY TELEPHONE NUMBER, for DOCTORS/FIRE BRIGADE/POLICE only:
GB - Telephone : +44-1344 371481 (During office hours only)

EMERGENCY TELEPHONE NUMBER (for DOCTORS only):
National Poisons Information Service +44 344 892 0111 (24/7)

SECTION 2 HAZARDS IDENTIFICATION

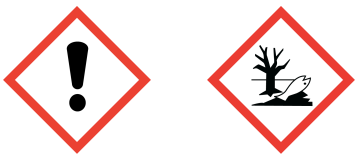
2.1. Classification of the substance or mixture

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.

	P280 hands eyes	Wear protective gloves and eye protection.
	P273	Avoid release to the environment.
	P391	Collect spillage.
	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 hands eyes	Wear protective gloves and eye protection.
P273	Avoid release to the environment.
P391	Collect spillage.
P501	Dispose of contents/container to an official chemical waste depot.

Additional labelling (for all packaging sizes)

: Contains: Hexyl salicylate ; Linalyl acetate ; 1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphtyl)ethan-1-one ; Cedryl methyl ketone ; 4-Allylanisole ; Cineole ; 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		
Hexyl salicylate	2,5 - < 5	6259-76-3	228-408-6		
Linalyl acetate	1 - < 5	115-95-7	204-116-4		
3,7-Dimethylnona-1,6-dien-3-ol	1 - < 5	10339-55-6	233-732-6		
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-naphtyl)ethan-1-one	1 - < 2,5	54464-57-2	259-174-3		
Cedryl methyl ketone	0,25 - < 1	32388-55-9	251-020-3		
4-Allylanisole	0,1 - < 1	140-67-0	205-427-8		
Cineole	0,1 - < 1	470-82-6	207-431-5		
2,4-Dimethylcyclohex-3-ene-1-carbaldehyde	0,1 - < 1	68039-49-6	268-264-1		
Alpha-Cedrene	0,1 - < 0,25	469-61-4	207-418-4		

Substance name	Hazard Class	H-phrases	Pictograms	

2,6-Dimethyloct-7-en-2-ol	Skin Irrit. 2; Eye Irrit. 2	H315; 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
Linalyl acetate	Skin Irrit. 2; Skin Sens. 1B; Eye Irrit. 2	H315; H317; H319	GHS07	
3,7-Dimethylnona-1,6-dien-3-ol	Skin Irrit. 2; Eye Irrit: 2	H315; H319	GHS07	
3,7-Dimethyloctan-3-ol	Eye Irrit. 2; Skin Irrit. 2	H315; H319	GHS07	
1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphtyl)ethan-1-one	Skin Irrit. 2; Skin Sens. 1B; Aquatic Chronic 1	H315; H317; H410	GHS07; GHS09	M (chronic) = 1
Cedryl methyl ketone	Skin Sens. 1B; Aquatic Acute 1; Aquatic Chronic 1	H317; H400; H410	GHS07; GHS09	M (acute) = 1 M (chronic) = 1
4-Allylanisole	Acute Tox. 4; Skin Sens. 1B; Muta. 2; Carc. 2	H302; H317; H341; H351	GHS07	
Cineole	Flam. Liq. 3; Skin Sens. 1B	H226; H317	GHS02; GHS07	
2,4-Dimethylcyclohex-3-ene-1-carbaldehyde	Eye Irrit. 2; Skin Irrit. 2; Skin Sens. 1B; Aquatic Chronic 2	H319; H315; H317; H411	GHS07; GHS09	
Alpha-Cedrene	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

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 : Carbondioxide (CO2). Foam. Dry chemical. Water fog.
Not suitable : Water jet.

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

7.1. Precautions for safe handling

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 (< 35 °C). 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				20,8 mg/kg bw/day
	Inhalation				73,5 mg/m3
Hexyl salicylate	Dermal		2083 mg/kg bw		2083 mg/kg bw/day
	Inhalation		0,729 mg/m3		0,729 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
3,7-Dimethylnona-1,6-dien-3-ol	Dermal	16 mg/kg bw	5,5 mg/kg bw	16 mg/kg bw/day	2,7 mg/kg bw/day
	Inhalation		18 mg/m3		3 mg/m3
3,7-Dimethyloctan-3-ol	Dermal				2,5 mg/kg bw/day
	Inhalation				2,75 mg/m3
1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphtyl)ethan-1-one	Dermal	0,1011 mg/kg bw			1,73 mg/kg bw/day
	Inhalation				1,76 mg/m3
Cedryl methyl ketone	Dermal				0,33 mg/kg bw/day
	Inhalation				1,175 mg/m3
Cineole	Dermal				2 mg/kg bw/day
	Inhalation				7,05 mg/m3
2,4-Dimethylcyclohex-3-ene-1-carbaldehyde	Dermal				0,125 mg/kg bw/day
	Inhalation				0,44 mg/m3

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				12,5 mg/kg bw/day
	Inhalation				21,7 mg/m3
	Oral				12,5 mg/kg bw/day
Hexyl salicylate	Dermal		1250 mg/kg bw		1250 mg/kg bw/day
	Inhalation		0,219 mg/m3		0,219 mg/m3
	Oral		0,0625 mg/kg bw		0,0625 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
3,7-Dimethylnona-1,6-dien-3-ol	Dermal	16 mg/kg bw	2,7 mg/kg bw	16 mg/kg bw/day	1,4 mg/kg bw/day
	Inhalation		4,4 mg/m3		0,74 mg/m3
	Oral		1,3 mg/kg bw		0,2 mg/kg bw/day
3,7-Dimethyloctan-3-ol	Dermal				1,25 mg/kg bw/day
	Inhalation				0,68 mg/m3

	Oral				0,2 mg/kg bw/day
1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphtyl)ethan-1-one	Dermal	0,0506 mg/kg bw			0,86 mg/kg bw/day
	Inhalation				0,43 mg/m3
	Oral				0,25 mg/kg bw/day
Cedryl methyl ketone	Dermal				0,166 mg/kg bw/day
	Inhalation				0,289 mg/m3
	Oral				0,166 mg/kg bw/day
Cineole	Dermal				1 mg/kg bw/day
	Inhalation				1,74 mg/m3
	Oral				600 mg/kg bw/day
2,4-Dimethylcyclohex-3-ene-1-carbaldehyde	Dermal				0,062 mg/kg bw/day
	Inhalation				0,108 mg/m3
	Oral				0,062 mg/kg bw/day

Predicted no-effect concentration (PNEC):

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
	Oral			111 mg/kg food
Hexyl salicylate	Water	0,000357 mg/l	0,0001 mg/l	
	Sediment	0,272 mg/kg	0,0272 mg/kg	
	Intermittent water			0,0036 mg/l
	STP			10 mg/l
	Soil			0,0542 mg/kg
Linalyl acetate	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			10 mg/l
	Soil			0,115 mg/kg
3,7-Dimethylnona-1,6-dien-3-ol	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
	Soil			0,031 mg/kg
	Oral			8,53 mg/kg food
3,7-Dimethyloctan-3-ol	Water	0,0089 mg/l	0,00089 mg/l	
	Sediment	0,0821 mg/kg	0,00821 mg/kg	
	Intermittent water			0,089 mg/l
	STP			450 mg/l
	Soil			0,0112 mg/kg
Cineole	Water	0,057 mg/l	0,0057 mg/l	
	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			133 mg/kg food
2,4-Dimethylcyclohex-3-ene-1-carbaldehyde	Water	0,0075 mg/l	0,00075 mg/l	
	Sediment	0,226 mg/kg	0,0226 mg/kg	
	Intermittent water			0,075 mg/l

	STP Soil			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: 4 hours.

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: 4 hours.

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

Appearance	: 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	
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	: None known.	Does not contain explosives.
Explosion limits (% in air)	: Not known. :	Lower explosion limit in air (%): 0,7 (Linalyl acetate) Upper explosion limit in air (%): 4,3 (Linalyl acetate)
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.	
Vapour density (20°C)	: > 1	(air = 1)
Relative density (20°C)	: 0,98 g/ml	
Evaporation rate	: Not known.	(n-butyl acetate = 1)

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 toxicological effects

No toxicological research has been carried out on this product.

Inhalation

- Acute toxicity : Calculated LC50: > 10 mg/l. Ingredients of unknown toxicity: 18 %. 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.
- 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
Hexyl salicylate	NOAEL (fertility) - estimate	Not reprotoxic	Read across	
	NOAEL (development) - estimate	Not teratogenic	Read across	
	Genotoxicity - in vivo	Not genotoxic	-----	Mouse
	Genotoxicity - in vitro	Not genotoxic	OECD 476	Chinese Hamster
	Mutagenicity	Negative	OECD 471	Salmonella typhimurium
	NOAEL (oral) - estimate	50 mg/kg bw/d	Read across	
	Skin irritation	Moderately irritant	OECD 404	Rabbit
	LD50 (dermal)	> 5000 mg/kg bw		Rabbit
	Eye irritation	Non-irritant	OECD 405	Rabbit
	LD50 (oral)	> 5000 mg/kg bw	-----	Rat
Linalyl acetate	LC50 (inhalation) - estimate	> 5000 mg/m3	-----	Rat
	NOAEL (development, oral)	> 1000 mg/kg bw/d	OECD 414	Rat
	Genotoxicity - in vivo	Not genotoxic	OECD 474	Mouse
	Genotoxicity - in vitro	Not genotoxic	OECD 476	Mouse
	Mutagenicity	Not mutagenic	OECD 471	Salmonella typhimurium
	NOAEL (dermal)	250 mg/kg bw/d	OECD 411	Rat
	NOAEL (oral)	160 mg/kg bw/d	OECD 407	Rat
	Eye irritation	Irritant	OECD 405	Rabbit
	Skin irritation	Irritant	OECD 404	Rabbit
	Skin irritation	Non-irritant	-----	Human
	LC50 (inhalation)	> 2740 mg/m3	-----	Mouse
	Skin sensitisation	Sensitizing.	OECD 429	Mouse
	LD50 (oral)	13934 mg/kg bw	-----	Rat
		1000 mg/kg bw/d	OECD 414	Rat

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
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) - estimate	200 mg/kg bw/d	Read across	Rat
	NOAEL (dermal) - estimate	250 mg/kg bw/d	Read across	Rat
	Skin sensitisation - estimate	Not sensitizing	Read across	Guinea pig
	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
1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphtyl)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
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
4-Allylanisole	NOAEL (development, oral)	> 50 mg/kg bw/d	-----	Rat
	Skin irritation	Moderately irritant		Rabbit
	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
Cineole	LD50 (oral)	2480 mg/kg bw	-----	Rat
	NOAEL (oral)	1200 mg/kg bw/d		Rat
	Genotoxicity - in vitro	Not genotoxic		
	Mutagenicity	Not mutagenic		Salmonella typhimurium
	Skin irritation	Non-irritant		

2,4-Dimethylcyclohex-3-ene-1-carbaldehyde	Mutagenicity	Not mutagenic		Salmonella typhimurium
	LD50 (dermal)	> 2000 mg/kg bw		Rabbit
	LD50 (oral)	> 2000 mg/kg bw		Rat
	Skin sensitisation	5900 ug/cm2		

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): 11 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.

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 ass

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

12.6. Other adverse effects

Other information : Not applicable.

Ecological information:

Chemical name	Property		Method	Test animal
Hexyl salicylate	EC50 (waterflea)	0,357 mg/l	OECD 202	Daphnia magna
	IC50 (algea)	0,28 mg/l	OECD 201	Desmodesmus subspicatus
	Ultimate aerobic biodegradation (%)	91 %	OECD 301 F	
	LC50 (fish) - estimate	1,34 mg/l	-----	Brachydanio rerio
	Log P(ow)	5,5000		
1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphtyl)ethan-1-one	LC50 (fish)	1,3 mg/l	OECD 203	-----
	EC50 (waterflea)	1,38 mg/l	OECD 202	-----
	IC50 (algea)	> 2,6 mg/l	OECD 201	-----
	Log P(ow)	5,23		
	BCF	600		
Cedryl methyl ketone	LC50 (fish)	2,3 mg/l	OECD 203	Pimephales promelas
	EC50 (waterflea)	0,86 mg/l	OECD 202	Daphnia magna
	IC50 (algea)	2,80 mg/l	OECD 201	Algae
	NOEC (waterflea) - chronic	0,087 mg/l.d	OECD 211	Daphnia magna
	Log P(ow)	5,6		
Alpha-Cedrene	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 into the environment, in drains or in 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

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)

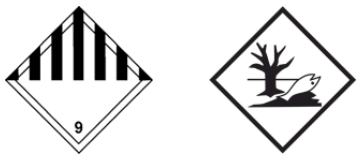
Transport name (IMDG, IATA) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Hexyl salicylate ; 1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphtyl)ethan-1-one)

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 : C/D

:



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 <= 5 L or <= 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 <= 5 L or <= 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

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. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

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

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

Community regulations : Regulation (EU) No 2015/830 (REACH), Regulation (EC) No 1272/2008 (CLP) and other regulations.

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 2015/830 dated 28 May 2015 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
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
VOC	:	Volatile Organic Compounds
vPvB	:	Very Persistent and Very Bioaccumulative

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

Number format : "," used as decimal separator.

End of safety data sheet.

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