



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 AIR FRESHENER BLACK VELVET
Product code : CRX720, AL61B

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 Polska Sp. z o. o.
Al. Jerozolimskie 146
02-305 Warszawa, Poland
Telephone : +48 22 822 5390
E-mail : msds@kemetyl.com
Website : www.kemetyl.com

1.4. Emergency telephone number

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

PL - Telephone : +48 22 822 5390

(During office hours only)

SECTION 2 HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

CLP classification : Skin sensitization, category 1. Hazardous to the aquatic environment — Chronic category 3. (1272/2008/EC)

Human health hazards : May cause an allergic skin reaction.

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

Environmental hazards : Harmful 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 :

H317	May cause an allergic skin reaction.
H412	Harmful 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 gloves	Wear protective gloves.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P302+P352	IF ON SKIN: Wash with plenty of water/soap.
P501	Dispose of contents/container to an official chemical waste depot.



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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.
H412	Harmful 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 gloves	Wear protective gloves.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P302+P352	IF ON SKIN: Wash with plenty of water/soap.
P501	Dispose of contents/container to an official chemical waste depot.

Additional labelling (for all packaging sizes)

: Contains: Linalyl acetate ; 4-(4-Hydroxy-4-methylpentyl)cyclohex-3-enecarbaldehyde ; 1-(1,2,3,5,6,7,8,8a-Octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one ; Lavender, Lavandula hybrida grosso, ext. ; d-Limonene ; Citral ; Pentadecan-15-olide ; 1,2,3,5,6,7-Hexahydro-1,1,2,3,3-pentamethyl-4H-inden-4-one ; 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

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3.2. Mixtures

Product description : Mixture.

Information on hazardous substances:

Substance name	Concentration (w/w) (%)	CAS nr.	EC number	Remark	REACH nr.
Linalyl acetate	< 3	115-95-7	204-116-4		01-2119454789-19
2,2,4,6,6-Pentamethylheptane	< 3	13475-82-6	236-757-0		01-2119490725-29
d-Limonene	< 1	5989-27-5	227-813-5		
1-(1,2,3,5,6,7,8,8a-Octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	< 1	68155-66-8	268-978-3		
4-(4-Hydroxy-4-methylpentyl)cyclohex-3-enecarbaldehyde	< 1	31906-04-4	250-863-4		
Lavender, Lavandula hybrida grosso, ext.	< 1	93455-97-1	297-385-2		
Citral	< 0,5	5392-40-5	226-394-6		01-2119462829-23
Pentadecan-15-olide	< 0,5	106-02-5	203-354-6		01-2119987323-31
1,2,3,5,6,7-Hexahydro-1,1,2,3,3-pentamethyl-4H-inden-4-one	< 0,25	33704-61-9	251-649-3		01-2119977131-40
2,4-Dimethylcyclohex-3-ene-1-carbaldehyde	< 0,25	68039-49-6	268-264-1		

Substance name	Hazard Class	H-phrases	Pictograms	
Linalyl acetate	Eye Irrit. 2; Skin Irrit. 2; Skin Sens. 1B	H315; H317; H319	GHS07	

Product name : Shell Air Freshener Black Velvet

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2,2,4,6,6-Pentamethylheptane	Aquatic Chronic 4; Asp. Tox. 1; Flam. Liq. 3	H226; H304; H413	GHS02; GHS08	
d-Limonene	Aquatic Acute 1; Aquatic Chronic 1; Asp. Tox. 1; Flam. Liq. 3; Skin Irrit. 2; Skin Sens. 1B	H226; H304; H315; H317; H400; H410	GHS02; GHS07; GHS08; GHS09	M (acute) = 1
1-(1,2,3,5,6,7,8,8a-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
4-(4-Hydroxy-4-methylpentyl)cyclohex-3-enecarbaldehyde	Skin Sens. 1A	H317	GHS07	
Lavender, <i>Lavandula hybrida</i> grosso, ext.	Aquatic Chronic 2; Asp. Tox. 1; Skin Irrit. 2; Skin Sens. 1B	H304; H315; H317; H411	GHS07; GHS08; GHS09	
Citral	Eye Irrit. 2; Skin Irrit. 2; Skin Sens. 1B	H315; H317; H319	GHS07	
Pentadecan-15-olide	Aquatic Chronic 2; Skin Sens. 1B	H317; H411	GHS07; GHS09	
1,2,3,5,6,7-Hexahydro-1,1,2,3,3-pentamethyl-4H-inden-4-one	Aquatic Chronic 2; Eye Irrit. 2; Skin Irrit. 2; Skin Sens. 1B	H315; H317; H319; H411	GHS07; GHS09	
2,4-Dimethylcyclohex-3-ene-1-carbaldehyde	Aquatic Chronic 2; Eye Irrit. 2; Skin Irrit. 2; Skin Sens. 1B	H315; H317; H319; H411	GHS07; GHS09	

Occupational exposure limit(s), if relevant, are listed in section 8.

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 if irritation persists.
- 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 : May cause redness and irritation, sensitisation. May produce an allergic reaction. May cause dry skin.
- Eye contact : May cause stinging of eyes and redness.
- 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



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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.

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. 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.



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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.

Workplace exposure limits (mg/m³):

Chemical name	Country	TWA 8 hour (mg/m ³)	STEL 15 min (mg/m ³)	Comments	Source
d-Limonene		28	80		MAC: DE, CH

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
Linalyl acetate	Dermal	0,2362 mg/kg bw		0,2362 mg/kg bw/day	2,5 mg/kg bw/day
	Inhalation				2,75 mg/m ³
d-Limonene	Inhalation				33,3 mg/m ³
Citral	Inhalation				9 mg/m ³
	Dermal				1,7 mg/kg bw/day
1,2,3,5,6,7-Hexahydro-1,1,2,3,3-pentamethyl-4H-inden-4-one	Inhalation				1,47 mg/m ³
	Dermal			5,510 mg/kg bw/day	0,42 mg/kg bw/day
2,4-Dimethylcyclohex-3-ene-1-carbaldehyde	Inhalation				
	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
Linalyl acetate	Dermal	0,2362 mg/kg bw		0,2362 mg/kg bw/day	1,25 mg/kg bw/day
	Inhalation				0,68 mg/m ³
d-Limonene	Oral				0,2 mg/kg bw/day
	Inhalation				8,33 mg/m ³
	Oral				4,76 mg/kg bw/day
Citral	Dermal				1 mg/kg bw/day
	Inhalation				2,7 mg/m ³
	Oral				0,6 mg/kg bw/day
1,2,3,5,6,7-Hexahydro-1,1,2,3,3-pentamethyl-4H-inden-4-one	Inhalation				0,44 mg/m ³
	Dermal			3,241 mg/kg bw/day	0,25 mg/kg bw/day
	Oral				
2,4-Dimethylcyclohex-3-ene-1-carbaldehyde	Inhalation				0,108 mg/m ³
	Dermal				0,062 mg/kg bw/day
	Oral				0,062 mg/kg bw/day

Predicted no-effect concentration (PNEC):



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Chemical name	Route of exposure	Fresh water	Marine water	
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
d-Limonene	STP			1 mg/l
	Soil			0,115 mg/kg
	Water	0,0054 mg/l	0,0005 mg/l	
	Sediment	1,32 mg/kg	0,13 mg/kg	
Citral	STP			1,8 mg/l
	Soil			0,262 mg/kg
	Oral			3,33 mg/kg food
	Water	0,00678 mg/l	0,000678 mg/l	
Pentadecan-15-olide	Sediment	0,125 mg/kg	0,0125 mg/kg	
	Intermittent water			0,0678 mg/l
	STP			1,6 mg/l
	Soil			0,0209 mg/kg
1,2,3,5,6,7-Hexahydro-1,1,2,3,3-pentamethyl-4H-inden-4-one	Water	0,0027 mg/l	0,00027 mg/l	
	Sediment	21 mg/kg	4,2 mg/kg	
	STP			10 mg/l
	Soil			10 mg/kg
2,4-Dimethylcyclohex-3-ene-1-carbaldehyde	Water	0,004 mg/l	0 mg/l	
	Sediment	0,0991 mg/kg	0,00991 mg/kg	
	STP			10 mg/l
	Soil			0,0174 mg/kg
	Oral			1,11 mg/kg food
	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			10 mg/l
	Soil			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: nitril. 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: nitril. ± 0,5 mm. Indication of permeation breakthrough time: 4 hours.
- Eye protection : Wear appropriate safety glasses when there is danger of possible eye contact.



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SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

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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	: > 100 °C	
Flammability (solid, gas)	: Not applicable.	Liquid. See flashpoint.
Auto ignition temperature	: > 225 °C	
Boiling point/boiling range	: > 100 °C	
Melting point/melting range	: Not known.	
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)	: 1 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



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Hazardous decomposition : Not known.
products

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: < 1 %. 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 : Does not contain carcinogenic substances. Not classified - based on available data, the classification criteria are not met.
- Mutagenicity : Does not contain mutagenic substances. 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 : Not classified - based on available data, the classification criteria are not met.
- 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 : Slight irritation possible. Not classified - based on available data, the classification criteria are not met.

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 : 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 : Does not contain carcinogenic substances. Not classified - based on available data, the classification criteria are not met.
- Mutagenicity : Does not contain mutagenic substances. 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
Linalyl acetate		1000 mg/kg bw/d	OECD 414	Rat
	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)	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



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d-Limonene	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 429	Mouse
	Genotoxicity - in vivo	> 2000 mg/kg bw/d		Rat
	NOEL (carcinogenicity, oral)	> 300 mg/kg bw/d	OECD 451	Rat
	Eye irritation	Non-irritant	OECD 405	Rabbit
	Mutagenicity	Negative	OECD 471	
	Skin sensitisation	10075 ug/cm2	OECD 429	Mouse
	NOAEL (development, oral)	600 mg/kg bw/d		Rat
4-(4-Hydroxy-4-methylpentyl)cyclohex-3-enecarbaldehyde	Skin irritation	Irritant	-----	-----
	LD50 (dermal)	> 2000 mg/kg bw	-----	Rabbit
	LD50 (oral)	4400 mg/kg bw	-----	Rat
	Genotoxicity - in vitro	Not genotoxic		
	NOAEL (oral)	150 mg/kg bw/d		Rat
	Skin irritation	Irritant	-----	Rabbit
	Skin irritation	Non-irritant	Patch test	Human
	LD50 (oral)	> 5000 mg/kg bw	-----	Rat
	LD50 (dermal)	> 5000 mg/kg bw	-----	Rabbit
	Eye irritation	Mildly irritant	-----	Rabbit
Citral	Skin sensitisation	4275 ug/cm2	OECD 429	Mouse
	NOAEL (fertility, oral)	25 mg/kg bw/d		Rat
	Genotoxicity - in vivo	Not genotoxic		Mouse
	NOAEL (fertility, oral)	> 1000 mg/kg bw/d	OECD 421	Rat
	Genotoxicity - in vivo	Negative	OECD 474	Mouse
	Eye irritation	Slightly irritant	OECD 405	Rabbit
	Skin irritation	Moderately irritant		Rabbit
	Skin irritation	Irritant		Human
	Skin sensitisation	Sensitizing.	OECD 406	Guinea pig
	NOAEL (developmental toxicity, inh.)	423 mg/m3	-----	Rat
Pentadecan-15-olide	NOEL (carcinogenicity, oral)	> 100 mg/kg bw/d	OECD 453	Rat
	Mutagenicity	Negative	OECD 471	
	LD50 (oral)	4960 mg/kg bw	-----	Rat
	Genotoxicity - in vitro	Not genotoxic		
	NOAEL (oral)	833 mg/kg bw/d	-----	Rat
	LD50 (dermal)	2250 mg/kg bw	-----	Rabbit
	NOAEL (development, oral)	200 mg/kg bw/d	OECD 421	Rat
	Genotoxicity - in vivo	> 1600 mg/kg bw/d		Mouse
	LD50 (oral)	> 5000 mg/kg bw	-----	Rat
	LD50 (dermal)	> 5000 mg/kg bw	-----	Rabbit
Pentadecan-15-olide	Skin irritation	Slightly irritant	OECD 404	Rabbit
	Skin irritation	Non-irritant	Patch test	Human
	NOAEL (fertility) - estimate	> 1000 mg/kg.d	Read across	Rat
	NOAEL (development) - estimate	> 1000 mg/kg.d	Read across	Rat



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1,2,3,5,6,7-Hexahydro-1,1,2,3,3-pentamethyl-4H-inden-4-one	NOAEL (oral) - estimate	> 1000 mg/kg bw/d	Read across	Rat
	Mutagenicity	Negative	OECD 471	Salmonella typhimurium
	Genotoxicity - estimate	Not genotoxic		
	Skin sensitisation	5450 ug/cm2	OECD 429	Mouse
	Genotoxicity - in vitro	Not genotoxic	OECD 476	Mouse
	LD50 (oral)	> 2325 mg/kg bw	OECD 401	Rat
	Mutagenicity	Negative	OECD 471	Salmonella typhimurium
	Skin irritation	Irritant		Human
	Eye irritation	Irritant	-----	-----
	NOAEL (oral)	10 mg/kg bw/d	OECD 408	Rat
2,4-Dimethylcyclohex-3-ene-1-carbaldehyde	NOAEL (development, oral)	115 mg/kg bw/d	OECD 421	Rat
	NOAEL (fertility, oral)	115 mg/kg bw/d	OECD 421	Rat
	Skin sensitisation	5900 ug/cm2		
	LD50 (oral)	> 2000 mg/kg bw		Rat
	LD50 (dermal)	> 2000 mg/kg bw		Rabbit
	Mutagenicity	Not mutagenic		Salmonella typhimurium

SECTION 12 ECOLOGICAL INFORMATION

12.1. Toxicity

No ecotoxicological research has been carried out on this product.

Ecotoxicity : Harmful to aquatic organisms. Calculated LC50 (fish): 61 mg/l. Calculated EC50 (waterflea): 25 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 assessment

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
d-Limonene	LC50 (fish)	0,720 mg/l	OECD 203	Pimephales promelas
	EC50 (waterflea)	0,36 mg/l	OECD 202	Daphnia magna
	Ultimate aerobic biodegradation (%)	> 92 %		
	NOEC (waterflea) - chronic	0,15 mg/l.d		Daphnia magna
d-Limonene	Log P(ow)	4,38		



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1-(1,2,3,5,6,7,8,8a-Octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	LC50 (fish) - estimate	1,3 mg/l		
	EC50 (waterflea) - estimate	1,38 mg/l		
1-(1,2,3,5,6,7,8,8a-Octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	Log P(ow)	4,7000		

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. : None.

14.2. UN proper shipping name

Transport name : Not regulated.

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

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

Class : This product is not classified according to ADR/RID/ADN.

IMDG (sea)

Class : This product is not classified according to IMDG.

Marine pollutant : No

IATA (air)

Class : This product is not classified according to IATA.

14.6. Special precautions for user

Other information : Country specific variations may apply.

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



Kemetyl

Safety data sheet

According to Regulation (EU) No 2015/830

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

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 Sens. 1/1A/1B	: Calculation method.
Aquatic Chronic 3	: Calculation method.

Full text of hazard classes mentioned in section 3:

Flam. Liq. 3	: Flammable liquid, category 3.
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Kemetyl

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According to Regulation (EU) No 2015/830

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.
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 4	: Hazardous to the aquatic environment — Chronic category 4.
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.
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.
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.
H413	May cause long lasting harmful effects to aquatic life.

Advice on any training appropriate for workers: none.

Number format : "," used as decimal separator.

End of safety data sheet.

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