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 FRUIT COCKTAIL
Product code : CRX780, AL53B; 9728151

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 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.pl

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 (1272/2008/EC) : Skin sensitization, category 1.

Human health hazards : May cause an allergic skin reaction.
Physical/chemical hazards : Not classified as dangerous according to statutory EC-Directives. Combustible.
Environmental hazards : Not classified as dangerous according to statutory EC-Directives.

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.
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.

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: Linalool ; Reaction mass of 3,5-dimethylcyclohex-3-ene-1-carbaldehyde and 2 ,4-dimethylcyclohex-3-ene-1-carbaldehyde ; Citral ; Ethyl 2,3-epoxy-3-phenylbutyrate ; 2 ,6-Dimethylhept-5-enal ; 4-Hydroxy-2,5-dimethylfuran-2(3H)-one ; 1-(2,6,6-Trimethyl-1,3-cyclohexadien-1-yl)-2-buten-1-one .

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.
Linalool	1 - < 5	78-70-6	201-134-4		01-2119474016-42
2-Phenylethanol	1 - < 5	60-12-8	200-456-2		01-2119963921-31
Undecan-4-olide	1 - < 5	104-67-6	203-225-4		01-2119959333-34
Cis-2-tert-butylcyclohexyl acetate	1 - < 2,5	20298-69-5	243-718-1		01-2119970713-33
Allyl hexanoate	1 - < 5	123-68-2	204-642-4		01-2119983573-26
Reaction mass of 3,5-dimethylcyclo-hex-3-ene-1-carbaldehyde and 2,4-di-methylcyclohex-3-ene-1-carbaldehyde	0,1 - < 1	-----	943-728-2		01-2119982384-28
4-Methyl-3-decen-5-ol	0,1 - < 1	81782-77-6	279-815-0		01-2119983528-21
Citral	0,1 - < 1	5392-40-5	226-394-6		01-2119462829-23
Ethyl 2,3-epoxy-3-phenylbutyrate	0,1 - < 1	77-83-8	201-061-8		01-2119967770-28
3,7-Dimethylocta-1,3,6-triene	0,1 - < 1	13877-91-3	237-641-2		01-2120739475-47
2,6-Dimethylhept-5-enal	0,1 - < 1	106-72-9	203-427-2		01-2120270305-62
4-Hydroxy-2,5-dimethylfuran-2(3H)-one	0,1 - < 1	3658-77-3	222-908-8		01-2120754473-52
Diphenyl ether	0,1 - < 1	101-84-8	202-981-2		01-2119472545-33
1-(2,6,6-Trimethyl-1,3-cyclohexadien-1-yl)-2-buten-1-one	0,01 - < 0,1	23696-85-7	245-833-2		

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

2-Phenylethanol	Acute Tox. 4; Eye Irrit. 2	H302; H319	GHS07	
Undecan-4-olide	Aquatic Chronic 3	H412		
Cis-2-tert-butylcyclohexyl acetate	Aquatic Chronic 2	H411	GHS09	
Allyl hexanoate	Acute Tox. 3; Acute Tox. 3; Acute Tox. 3; Aquatic Acute 1; Aquatic Chronic 3	H301; H311; H331; H400; H412	GHS06; GHS09	M (acute) = 1
Reaction mass of 3,5-dimethylcyclohex-3-ene-1-carbaldehyde and 2,4-dimethylcyclohex-3-ene-1-carbaldehyde	Skin Irrit. 2; Skin Sens. 1; Aquatic Chronic 2	H315; H317; H411	GHS07; GHS09	
4-Methyl-3-decen-5-ol	Aquatic Acute 1; Aquatic Chronic 2	H400; H411	GHS09	M (acute) = 1
Citral	Skin Irrit. 2; Skin Sens. 1B; Eye Irrit. 2	H315; H317; H319	GHS07	
Ethyl 2,3-epoxy-3-phenylbutyrate	Skin Sens. 1B; Aquatic Chronic 2	H317; H411	GHS07; GHS09	
3,7-Dimethylocta-1,3,6-triene	Flam. Liq. 3; Asp. Tox. 1; Skin Irrit. 2; Aquatic Acute 1; Aquatic Chronic 2	H226; H304; H315; H400; H411	GHS02; GHS07; GHS08; GHS09	M (acute) = 1
2,6-Dimethylhept-5-enal	Skin Sens. 1B	H317	GHS07	
4-Hydroxy-2,5-dimethylfuran-2(3H)-one	Acute Tox. 4; Skin Corr. 1B; Skin Sens. 1A; Eye Dam. 1	H302; H314; H317; H318	GHS05; GHS07	
Diphenyl ether	Eye Irrit. 2	H319	GHS07	
1-(2,6,6-Trimethyl-1,3-cyclohexadien-1-yl)-2-buten-1-one	Skin Irrit. 2; Skin Sens. 1A; Aquatic Chronic 2	H315; H317; 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 *

5.1. Extinguishing media

Extinguishing media
- Suitable : Carbondioxide (CO2). 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.
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. 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.

Workplace exposure limits (mg/m³):

Chemical name	Country	TWA 8 hour (mg/m3)	STEL 15 min (mg/m3)	Comments	Source
Diphenyl ether	GB	7,1 7	-	-	MAC: various EU Member states

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
Linalool	Inhalation				24.58 mg/m3
	Dermal	3 mg/kg bw		3 mg/kg bw/day	3.5 mg/kg bw/day
2-Phenylethanol	Inhalation				59,9 mg/m3
	Dermal				21,2 mg/kg bw/day
Undecan-4-olide	Inhalation				19 mg/m3
	Dermal				5,38 mg/kg bw/day
Allyl hexanoate	Inhalation				15 mg/m3
	Dermal				4,3 mg/kg bw/day
Reaction mass of 3,5-dimethylcyclo-hex-3-ene-1-carbaldehyde and 2,4-di-methylcyclohex-3-ene-1-carbaldehyde	Inhalation				1,837 mg/m3
	Dermal				0,521 mg/kg bw/day
4-Methyl-3-decen-5-ol	Inhalation				0,88 mg/m3
	Dermal			0,05 mg/kg bw/day	0,5 mg/kg bw/day
Citral	Inhalation				9 mg/m3
	Dermal				1,7 mg/kg bw/day
Ethyl 2,3-epoxy-3-phenylbutyrate	Inhalation				2,45 mg/m3
	Dermal				0,7 mg/kg bw/day
Diphenyl ether	Inhalation	14 mg/m3		7 mg/m3	59 mg/m3
	Dermal				25 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
Linalool	Dermal	1.5 mg/kg bw		1.5 mg/kg bw/day	1.25 mg/kg bw/day
	Inhalation				4.33 mg/m3
	Oral				2.49 mg/kg bw/day
2-Phenylethanol	Inhalation				17,7 mg/m3
	Dermal				12,7 mg/kg bw/day
	Oral		5,1 mg/kg bw		5,1 mg/kg bw/day

Undecan-4-olide	Inhalation				4,68 mg/m3
	Dermal				2,7 mg/kg bw/day
	Oral				2,7 mg/kg bw/day
Allyl hexanoate	Oral				2,1 mg/kg bw/day
	Inhalation				3,7 mg/m3
	Dermal				2,1 mg/kg bw/day
Reaction mass of 3,5-dimethylcyclo-hex-3-ene-1-carbaldehyde and 2,4-di-methylcyclohex-3-ene-1-carbaldehyde	Inhalation				0,543 mg/m3
	Oral				0,312 mg/kg bw/day
	Dermal				0,312 mg/kg bw/day
4-Methyl-3-decen-5-ol	Inhalation				0,22 mg/m3
	Dermal			0,02 mg/kg bw/day	0,25 mg/kg bw/day
	Oral				0,06 mg/kg bw/day
Citral	Dermal				1 mg/kg bw/day
	Inhalation				2,7 mg/m3
	Oral				0,6 mg/kg bw/day
Ethyl 2,3-epoxy-3-phenylbutyrate	Inhalation				0,61 mg/m3
	Dermal				0,35 mg/kg bw/day
	Oral				0,35 mg/kg bw/day

Predicted no-effect concentration (PNEC):

Chemical name	Route of exposure	Fresh water	Marine water	
Linalool	Water	0,2 mg/l	0,02 mg/l	
	Sediment	2,22 mg/kg	0,222 mg/kg	
	Intermittent water			2 mg/l
	STP			10 mg/l
	Soil			0,327 mg/kg
	Oral			7,8 mg/kg food
2-Phenylethanol	Water	0,215 mg/l	0,0215 mg/l	
	Sediment	1,454 mg/kg	0,1454 mg/kg	
	Intermittent water			2,15 mg/l
	STP			10 mg/l
	Soil			0,164 mg/kg
Undecan-4-olide	Water	0,0058 mg/l	0,00058 mg/l	
	Sediment	0,628 mg/kg	0,063 mg/kg	
	Intermittent water			0,058 mg/l
	STP			80 mg/l
	Soil			0,122 mg/kg
	Oral			66,7 mg/kg food
Cis-2-tert-butylcyclohexyl acetate	Water	0,011 mg/l	0,0011 mg/l	
	Sediment	1,5 mg/kg	0,15 mg/kg	
	Intermittent water			0,017 mg/l
	STP			10 mg/l
	Soil			0,293 mg/kg
Allyl hexanoate	Water	0,000117 mg/l	0,000011 mg/l	
	Sediment	0,00446 mg/kg	0,000446 mg/kg	
	Intermittent water			0,00117 mg/l
	STP			10 mg/l
	Soil			0,000825 mg/kg
	Oral			47,56 mg/kg food
Reaction mass of 3,5-dimethylcyclohex-3-ene-1-carbaldehyde and 2,4-dimethylcyclohex-3-ene-1-carbaldehyde	Water	0.0075 mg/l	0.00075 mg/l	

	Sediment	0.226 mg/kg	0.023 mg/kg	
	STP			10 mg/l
	Soil			0.041 mg/kg
4-Methyl-3-decen-5-ol	Water	0,00076 mg/l	0,000076 mg/l	
	Sediment	0,092 mg/kg	0,0092 mg/kg	
	STP			10 mg/l
	Soil			0,018 mg/kg
	Oral			111,1 mg/kg food
Citral	Water	0,00678 mg/l	0,000678 mg/l	
	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
Ethyl 2,3-epoxy-3-phenylbutyrate	Water	0,0084 mg/l	0,0084 mg/l	
	Sediment	0,214 mg/kg	0,0214 mg/kg	
	Intermittent water			0,084 mg/l
	STP			10 mg/l
	Soil			0,0378 mg/kg
	Oral			23,3 mg/kg food
Diphenyl ether	Water	0 mg/l	0 mg/l	
	Sediment	0,093 mg/kg	0,009 mg/kg	
	Intermittent water			0,017 mg/l
	STP			10 mg/l
	Soil			0,018 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 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	:	80 °C	Closed cup.
Flammability (solid, gas)	:	Not applicable.	Liquid. See flashpoint.
Auto ignition temperature	:	> 230 °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 (%): 0,9 (Linalool)
	:		Upper explosion limit in air (%): 11,9 (2-Phenylethanol)
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)	:	1 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: 7 %. 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 : 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 : 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
Linalool	NOAEL (development, oral)	365 mg/kg bw/d	-----	Rat
	Eye irritation	Non-irritant	OECD 405	Rabbit
	Skin sensitisation	12650 ug/cm2	OECD 429	Mouse
	Mutagenicity	Negative	OECD 471	Salmonella typhimurium
	NOAEL (fertility, oral)	500 mg/kg bw/d		Rat
	Skin irritation	Irritant	OECD 404	Rabbit
	NOAEL (dermal)	250 mg/kg bw/d	OECD 411	Rat
	Genotoxicity - in vivo	Not genotoxic	OECD 475	Mouse
	LD50 (dermal)	5610 mg/kg bw	-----	Rabbit
	Skin irritation	Mildly irritant	-----	Human
	LD50 (oral)	2790 mg/kg bw	-----	Rat
	NOAEL (oral)	117 mg/kg bw/d	-----	Rat
Reaction mass of 3,5-dimethylcyclohex-3-ene-1-carbaldehyde and 2,4-dimethylcyclohex-3-ene-1-carbaldehyde	LD50 (oral)	3900 mg/kg bw		Rat
	Eye irritation	Slightly irritant		Rabbit
	Skin irritation	Irritant		Rabbit

	LD50 (dermal)	> 5000 mg/kg bw		Rabbit
	Skin sensitisation - estimate	Sensitizing.	Read across	Guinea pig
	NOAEL (development) - estimate	25 mg/kg.d	Read across	Rat
	NOAEL (fertility) - estimate	Not reprotoxic	Read across	Rat
	Mutagenicity	Negative	OECD 471	Salmonella typhimurium
	Genotoxicity - estimate	Not genotoxic	Read across	
	NOAEL (oral) - estimate	150 mg/kg bw/d	Read across	Rat
Citral	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
	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
Ethyl 2,3-epoxy-3-phenylbutyrate	NOEL (carcinogenicity, oral)	35 mg/kg bw/d		Rat
	LD50 (oral)	5000 mg/kg bw		Rat
	NOEL (oral)	35 mg/kg bw/d		Rat
	Mutagenicity	Negative	OECD 471	Salmonella typhimurium
	Skin irritation	Non-irritant	OECD 429	
	LD50 (dermal)	> 2000 mg/kg bw	OECD 402	Rat
	Genotoxicity - in vivo	Negative		Mouse
	Eye irritation	Non-irritant	OECD 405	Rabbit
	NOAEL (developmental toxicity, dermal)	> 1000 mg/kg bw/d	OECD 421	Rat
	Skin sensitisation	Sensitizing.	OECD 406	Guinea pig
	NOAEL (oral)	> 35 mg/kg bw/d		Rat
	NOAEL (dermal)	1000 mg/kg bw/d	OECD 421	Rat
	NOAEL (fertility, dermal)	> 1000 mg/kg bw/d	OECD 421	Rat
2,6-Dimethylhept-5-enal	LD50 (oral)	> 5000 mg/kg bw	-----	Rat
	LD50 (dermal)	> 5000 mg/kg bw	-----	Rabbit
	Mutagenicity	Negative	OECD 471	Salmonella typhimurium
	Genotoxicity - in vivo	Not genotoxic	OECD 474	Mouse
	NOAEL (oral)	300 mg/kg bw/d	-----	Rat
	Skin sensitisation	Sensitizing.	OECD 429	Mouse
4-Hydroxy-2,5-dimethylfuran-2(3H)-one	LD50 (oral)	1660 mg/kg bw	OECD 401	Rat
1-(2,6,6-Trimethyl-1,3-cyclohexadien-1-yl)-2-buten-1-one	LD50 (oral)	2000 mg/kg bw	-----	Rat
	NOAEL (oral)	> 10 mg/kg bw/d	-----	-----

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 : Calculated LC50 (fish): 5 mg/l. Calculated EC50 (waterflea): 27 mg/l. Contains 0 % of components with unknown hazards to the aquatic environment. Not classified - based on available data, the classification criteria are not met.

12.2. Persistence and degradability

Persistence – degradability : No specific information known.

12.3. Bioaccumulative potential

Bioaccumulative potential : No specific information known.

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.

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. : 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. 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 *

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
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 Sens. 1/1A/1B	:	Calculation method.

Full text of hazard classes mentioned in section 3:

Flam. Liq. 3	:	Flammable liquid, category 3.
Acute Tox. 3	:	Acute toxicity, category 3.
Acute Tox. 4	:	Acute toxicity, category 4.
Skin Corr. 1A/B/C	:	Skin corrosive, category 1A/B/C.
Skin Irrit. 2	:	Skin irritation, category 2.
Eye Dam. 1	:	Serious eye damage, category 1.
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 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.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H331	Toxic if inhaled.
H304	May be fatal if swallowed and enters airways.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H400	Very toxic to aquatic life.
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.

End of safety data sheet.

Print date	:	2022-11-17