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 WALK ON THE BEACH
Product code : CRX781, AL53C; 9728150

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 *

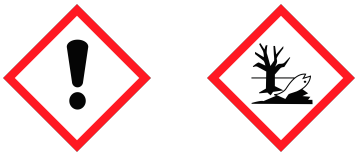
2.1. Classification of the substance or mixture

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

Human health hazards : Causes skin irritation. May cause an allergic skin reaction.
Physical/chemical hazards : Not classified as dangerous according to statutory EC-Directives.
Environmental hazards : Toxic to aquatic life with long lasting effects.

2.2. Label elements

Label elements ((EU) 1272/2008):
Hazard pictograms :



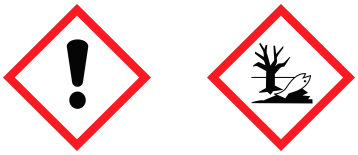
Signal word : Warning

H- and P-phrases :

H315	Causes skin 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	Wear protective gloves.
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	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: 1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one ; dl-Limonene ; 7-Hydroxycitronellal ; Alpha-methyl-1,3-benzodioxole-5-propionaldehyde ; Coumarin ; 1-(2,6,6 -Trimethyl-3-cyclohexen-1-yl)-2-buten-1-one ; Linalyl acetate ; Linalool ; 2,2,6-Trimethyl-alpha-propylcyclohexanepropanol ; 3-(p-Ethylphenyl)-2,2-dimethylpropionaldehyde ; Pin-2(10)-ene ; Pin-2(3)-ene ; Eugenol ; Cinnamaldehyde ; Isoeugenol .

2.3. Other hazards

Other information : Does not contain PBT or vPvB substances in concentrations higher than 0,1%. Human health: This product does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Regulation (EU) 2017/2100 or Regulation (EU) 2018/605 at levels of 0.1% or higher. Environment: This product does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Regulation (EU) 2017/2100 or Regulation (EU) 2018/605 at levels of 0.1% or higher.

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.
1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	5 - < 10	54464-57-2	259-174-3		
2,6-Dimethyloct-7-en-2-ol	5 - < 10	18479-58-8	242-362-4		01-2119457274-37
dl-Limonene	2,5 - < 5	138-86-3	205-341-0		
7-Hydroxycitronellal	1 - < 5	107-75-5	203-518-7		01-2119973482-31
Alpha-methyl-1,3-benzodioxole-5-propionaldehyde	1 - < 2,5	1205-17-0	214-881-6		01-2120740119-58
Coumarin	1 - < 5	91-64-5	202-086-7		01-2119949300-45
1-(2,6,6-Trimethyl-3-cyclohexen-1-yl)-2-buten-1-one	0,1 - < 1	57378-68-4	260-709-8		
Linalyl acetate	0,1 - < 1	115-95-7	204-116-4		01-2119454789-19
Linalool	0,1 - < 1	78-70-6	201-134-4		01-2119474016-42
2,2,6-Trimethyl-alpha-propylcyclohexanepropanol	0,1 - < 1	70788-30-6	274-892-7		

3-(p-Ethylphenyl)-2,2-dimethylpropi-onaldehyde	0,1 - < 1	67634-15-5	266-819-2		
Allyl (cyclohexyloxy)acetate	0,1 - < 1	68901-15-5	272-657-3		01-2120770514-54
Pin-2(10)-ene	0,1 - < 1	127-91-3	204-872-5		
Pin-2(3)-ene	0,1 - < 1	80-56-8	201-291-9		
Eugenol	0,1 - < 1	97-53-0	202-589-1		01-2119971802-33
p-Mentha-1,4-diene	0,1 - < 1	99-85-4	202-794-6		
Cinnamaldehyde	0,01 - < 0,1	104-55-2	203-213-9		
Isoeugenol	< 0,01	97-54-1	202-590-7		

Substance name	Hazard Class	H-phrases	Pictograms	
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
2,6-Dimethyloct-7-en-2-ol	Skin Irrit. 2; Eye Irrit. 2	H315; H319	GHS07	
dl-Limonene	Flam. Liq. 3; Asp. Tox. 1; Skin Irrit. 2; Skin Sens. 1; Aquatic Acute 1; Aquatic Chronic 1	H226; H304; H315; H317; H400; H410	GHS02; GHS07; GHS08; GHS09	M (acute) = 1
7-Hydroxycitronellal	Skin Sens. 1B; Eye Irrit. 2	H317; H319	GHS07	
Alpha-methyl-1,3-benzodioxole-5-propionaldehyde	Skin Sens. 1B; Repr. 2; Aquatic Chronic 2	H317; H361fd; H411	GHS07; GHS08; GHS09	
Coumarin	Acute Tox. 4; Skin Sens. 1B; Aquatic Chronic 3	H302; H317; H412	GHS07	
1-(2,6,6-Trimethyl-3-cyclohexen-1-yl)-2-buten-1-one	Acute Tox. 4; Skin Irrit. 2; Skin Sens. 1A; Aquatic Acute 1; Aquatic Chronic 1	H302; 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	
Linalool	Skin Irrit. 2; Skin Sens. 1B; Eye Irrit. 2	H315; H317; H319	GHS07	
2,2,6-Trimethyl-alpha-propylcyclohexanepropanol	Skin Sens. 1B	H317	GHS07	
3-(p-Ethylphenyl)-2,2-dimethylpropionaldehyde	Skin Irrit. 2; Skin Sens. 1B; Aquatic Acute 1; Aquatic Chronic 2	H315; H317; H400; H411	GHS07; GHS09	M (acute) = 1
Allyl (cyclohexyloxy)acetate	Acute Tox. 4; Aquatic Acute 1; Aquatic Chronic 1	H302; H400; H410	GHS07; GHS09	M (acute) = 1 M (chronic) = 1
Pin-2(10)-ene	Flam. Liq. 3; Asp. Tox. 1; Skin Irrit. 2; Skin Sens. 1B; Aquatic Acute 1; Aquatic Chronic 1	H226; H304; H315; H317; H400; H410	GHS02; GHS07; GHS08; GHS09	M (acute) = 1 M (chronic) = 1
Pin-2(3)-ene	Flam. Liq. 3; Acute Tox. 4; Asp. Tox. 1; Skin Irrit. 2; Skin Sens. 1B; Aquatic Acute 1; Aquatic Chronic 1	H226; H302; H304; H315; H317; H400; H410	GHS02; GHS07; GHS08; GHS09	M (acute) = 1 M (chronic) = 1
Eugenol	Skin Sens. 1B; Eye Irrit. 2	H317; H319	GHS07	
p-Mentha-1,4-diene	Flam. Liq. 3; Repr. 2; Aquatic Chronic 2	H226; H361; H411	GHS02; GHS08; GHS09	

Cinnamaldehyde	Acute Tox. 4; Skin Irrit. 2; Skin Sens. 1A; Eye Irrit. 2; Aquatic Chronic 3	H312; H315; H317; H319; H412	GHS07	H317 : C >= 0,01 %
Isoeugenol	Acute Tox. 4; Acute Tox. 4; Skin Irrit. 2; Skin Sens. 1A; Eye Irrit. 2; Acute Tox. 4; STOT SE 3	H302; H312; H315; H317; H319; H332; H335	GHS07	H317 : C >= 0,01 %

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 : Irritant. 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 (CO_2). 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 and combustion 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. 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
dl-Limonene		140			MAC: NO
Pin-2(3)-ene		113	-		MAC: BE

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
1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	Inhalation				30 mg/m3
	Dermal			0.648 mg/kg bw/day	28.7 mg/kg bw/day
2,6-Dimethyloct-7-en-2-ol	Dermal				7 mg/kg bw/day
	Inhalation				24.7 mg/m3
7-Hydroxycitronellal	Inhalation				18 mg/m3
	Dermal			0.5 mg/kg bw/day	1,9 mg/kg bw/day
Alpha-methyl-1,3-benzodioxole-5-propionaldehyde	Inhalation				1,2 mg/m3
	Dermal			0,01 mg/kg bw/day	0,17 mg/kg bw/day
Coumarin	Dermal				0,79 mg/kg bw/day
	Inhalation				6,78 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
Linalool	Inhalation				24.58 mg/m3
	Dermal	3 mg/kg bw		3 mg/kg bw/day	3.5 mg/kg bw/day
Allyl (cyclohexyloxy)acetate	Inhalation				3,16 mg/m3
	Dermal				0,448 mg/kg bw/day
Pin-2(10)-ene	Inhalation				5,69 mg/m3
	Dermal			0,054 mg/kg bw/day	0,8 mg/kg bw/day
Pin-2(3)-ene	Inhalation				3,8 mg/m3
	Dermal				0,542 mg/kg bw/day
Eugenol	Inhalation				21,2 mg/m3
	Dermal				6 mg/kg bw/day
p-Mentha-1,4-diene	Inhalation				2,939 mg/m3
	Dermal				0,833 mg/kg bw/day
Cinnamaldehyde	Inhalation				6,11 mg/m3
	Dermal				1,75 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
1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphthyl)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
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
7-Hydroxycitronellal	Inhalation				5,4 mg/m3
	Dermal			0.5 mg/kg bw/day	1,1 mg/kg bw/day
	Oral				0,6 mg/kg bw/day
Alpha-methyl-1,3-benzodioxole-5-propionaldehyde	Inhalation				0,29 mg/m3

	Dermal			0,005 mg/kg bw/day	0,083 mg/kg bw/day
	Oral				0,17 mg/kg bw/day
Coumarin	Dermal				0,39 mg/kg bw/day
	Oral				0,39 mg/kg bw/day
	Inhalation				1,69 mg/m3
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
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
Allyl (cyclohexyloxy)acetate	Inhalation				0,557 mg/m3
	Dermal				0,16 mg/kg bw/day
	Oral				0,16 mg/kg bw/day
Pin-2(10)-ene	Inhalation				1 mg/m3
	Dermal			0,027 mg/kg bw/day	0,3 mg/kg bw/day
	Oral				0,3 mg/kg bw/day
Pin-2(3)-ene	Inhalation				0,674 mg/m3
	Dermal				0,225 mg/kg bw/day
	Oral				0,225 mg/kg bw/day
Eugenol	Inhalation				5,22 mg/m3
	Dermal				3 mg/kg bw/day
	Oral				3 mg/kg bw/day
p-Mentha-1,4-diene	Inhalation				0,725 mg/m3
	Dermal				0,417 mg/kg bw/day
	Oral				0,417 mg/kg bw/day
Cinnamaldehyde	Inhalation				1,09 mg/m3
	Dermal				0,625 mg/kg bw/day
	Oral				0,625 mg/kg bw/day

Predicted no-effect concentration (PNEC):

Chemical name	Route of exposure	Fresh water	Marine water	
1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	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
	Oral			26.7 mg/kg food
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
7-Hydroxycitronellal	Water	0.0316 mg/l	0.00316 mg/l	
	Sediment	0.145 mg/kg	0.015 mg/kg	
	STP			10 mg/l
	Soil			0.011 mg/kg
Alpha-methyl-1,3-benzodioxole-5-propionaldehyde	Water	0,005 mg/l	0,001 mg/l	
	Sediment	0,057 mg/kg	0,006 mg/kg	
	STP			10 mg/l

	Soil			0,008 mg/kg
Coumarin	Water	0,019 mg/l	0,0019 mg/l	
	Sediment	0,15 mg/kg	0,015 mg/kg	
	Intermittent water			0,0142 mg/l
	STP			6,4 mg/l
	Soil			0,018 mg/kg
	Oral			30,7 mg/kg food
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			1 mg/l
	Soil			0,115 mg/kg
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
Allyl (cyclohexyloxy)acetate	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
Pin-2(10)-ene	Water	0,001004 mg/l	0,0001 mg/l	
	Sediment	0,337 mg/kg	0,034 mg/kg	
	STP			3,26 mg/l
	Soil			0,067 mg/kg
	Oral			13,1 mg/kg food
Pin-2(3)-ene	Water	0.000606 mg/l	0.000061 mg/l	
	Sediment	0,157 mg/kg	0,0157 mg/kg	
	STP			0,2 mg/l
	Soil			0,0317 mg/kg
	Oral			8,76 mg/kg food
Eugenol	Water	0.00113 mg/l	0.000113 mg/l	
	Sediment	0.081 mg/kg	0.008 mg/kg	
	Soil			0.015 mg/kg
p-Mentha-1,4-diene	Water	0.003 mg/l	0 mg/l	
	Sediment	0.49 mg/kg	0.049 mg/kg	
	STP			10 mg/l
	Soil			0.423 mg/kg
Cinnamaldehyde	Water	0.008 mg/l	0.0008 mg/l	
	Sediment	0.101 mg/kg	0.0101 mg/kg	
	Intermittent water			1,004 mg/l
	STP			7.1 mg/l
	Soil			0.0156 mg/kg

8.2. Exposure controls

Engineering measures : Comply with standard precautionary measures for working with chemicals. See Directive 2004/37/EG on the protection of workers from the risks related to exposure to carcinogens or mutagens at work.

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	:	> 100 °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 (dl-Limonene)
	:		Upper explosion limit in air (%): 6,1 (dl-Limonene)
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	:	Not known	(air = 1)
Relative density (20°C)	:	0,88 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 : 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: > 5000 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 : 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 classified - Based on available data, the classification criteria are not met. Fertility: Not classified - based on available data, the classification criteria are not met.

Toxicological information:

Chemical name	Property		Method	Test animal
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	
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
dl-Limonene	Skin sensitisation - estimate	Sensitizing.	Read across	
	NOAEL (oral) - estimate	1200 mg/kg bw/d	Read across	Rat
	NOAEL (fertility) - estimate	Not reprotoxic	Read across	
	Genotoxicity - estimate	Not genotoxic	Read across	
	Mutagenicity - estimate	Not mutagenic	Read across	
	NOAEL (development) - estimate	591 mg/kg.d	Read across	Rat
	LD50 (dermal) - estimate	> 5000 mg/kg bw	Read across	
	Skin irritation	Moderately irritant	OECD 404	Rabbit
	LD50 (oral)	5300 mg/kg bw	-----	Rat
7-Hydroxycitronellal	Respiratory irritation	Irritant		
	LD50 (dermal)	> 2000 mg/kg bw	-----	Rabbit
	Skin sensitisation	5612 ug/cm2	OECD 429	Mouse
	Skin irritation	850 ug/cm2	OECD 404	
	Eye irritation	Irritant		
	Skin irritation	Non-irritant		
	LD50 (oral)	> 5000 mg/kg bw	-----	Rat
	NOEL (oral)	250 mg/kg bw/d		
	Genotoxicity - in vivo	Not genotoxic		Mouse
	NOEL (carcinogenicity) - estimate	Not carcinogenic		
	Mutagenicity	Negative	OECD 471	Salmonella typhimurium
Alpha-methyl-1,3-benzodioxole-5-propionaldehyde	Skin sensitisation	4100 ug/cm2	OECD 429	-----
	NOAEL (dermal)	> 300 mg/kg bw/d	-----	Rat
	NOAEL (development, oral)	> 500 mg/kg bw/d		Rat
	Skin irritation	Non-irritant		

	LD50 (oral)	3600 mg/kg bw	-----	Rat
	LD50 (dermal)	> 2000 mg/kg bw	-----	Rabbit
	Skin irritation	Non-irritant		
	NOAEL (fertility, oral)	100 mg/kg bw/d	OECD 422	Rat
Coumarin	Skin sensitisation	> 12500 ug/cm2	OECD 429	Mouse
	NOAEL (development, oral)	> 115 mg/kg bw/d		Mouse
	Eye irritation	Non-irritant		Rabbit
	LD50 (oral)	680 mg/kg bw	-----	Rat
	NOAEL (oral)	> 138,3 mg/kg bw/d		Mouse
	Skin irritation	Non-irritant		Rabbit
	Genotoxicity - in vitro	Not genotoxic	OECD 476	
	Mutagenicity	Negative	OECD 471	Salmonella typhimurium
	Genotoxicity - in vivo	> 105 mg/kg bw/d	OECD 474	Mouse
	NOEL (carcinogenicity) - estimate	Not carcinogenic		
1-(2,6,6-Trimethyl-3-cyclohexen-1-yl)-2-buten-1-one	Genotoxicity - estimate	Not genotoxic	Read across	-----
	NOAEL (development) - estimate	Not teratogenic	Read across	-----
	NOAEL (fertility) - estimate	Not reprotoxic	Read across	-----
	NOEL (carcinogenicity) - estimate	Not carcinogenic	Read across	
	NOAEL (dermal) - estimate	50 mg/kg bw/d	Read across	Rat
	NOAEL (oral) - estimate	10 mg/kg bw/d	Read across	Rat
	Mutagenicity	Negative	OECD 471	Salmonella typhimurium
	LD50 (oral)	1821 mg/kg bw		Mouse
Linalyl acetate	Outdoor cleaners (excludes stone, concrete and similar surfaces)	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) - 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
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
2,2,6-Trimethyl-alpha-propylcyclohexanepropanol	LD50 (oral)	> 20000 mg/kg bw		
3-(p-Ethylphenyl)-2,2-dimethylpropionaldehyde	LD50 (dermal)	> 5000 mg/kg bw		Rabbit
	LD50 (oral)	> 5000 mg/kg bw		Rat
	LC50 (inhalation) - estimate	> 5000 mg/m3		
	Skin sensitisation - estimate	Sensitizing.	Read across	
Pin-2(10)-ene	Eye irritation	Moderately irritant	OECD 405	Rabbit
	NOAEL (development) - estimate	250 mg/kg.d	Read across	
	Skin irritation	Irritant	-----	-----
	Mutagenicity	Negative	OECD 471	Salmonella typhimurium
	LD50 (oral)	> 5000 mg/kg bw		Rat
	LD50 (dermal)	> 5000 mg/kg bw		Rabbit
Pin-2(3)-ene	Skin sensitisation	Sensitizing.	-----	Guinea pig
	Skin irritation	Non-irritant	-----	Human
	NOAEL (fertility, oral)	749 mg/kg bw/d	OECD 421	Rat
	Skin irritation	Moderately irritant	-----	Rabbit
	Mutagenicity	Not mutagenic	-----	Salmonella typhimurium
	Eye irritation - estimate	Moderately irritant	Read across	Rabbit
	Genotoxicity - estimate	Not genotoxic	Read across	
	NOAEL (inhalation)	170 mg/m3	OECD 413	Rat
	NOAEL (oral) - estimate	800 mg/kg bw/d	Read across	
	LD50 (oral)	500 mg/kg bw	OECD 423	Rat
	LD50 (dermal)	> 2000 mg/kg bw	OECD 402	Rat
Eugenol	LD50 (oral)	> 2000 mg/kg bw	OECD 423	Rat
	LC50 (inhalation)	> 2580 mg/m3	OECD 403	Rat
	LC50 (inhalation) - estimate	> 5000 mg/m3		Rat
	LD50 (dermal)	> 2000 mg/kg bw		Rat
	NOEL (carcinogenicity, oral)	300 mg/kg bw/d	-----	Rat
	Skin sensitisation	2703 ug/cm2	OECD 429	Mouse
	NOAEL (oral)	600 mg/kg bw/d	OECD 408	Rat
	Genotoxicity - in vitro	Genotoxic	OECD 476	Mouse
	Genotoxicity - estimate	Not genotoxic		
	Genotoxicity - in vivo	Genotoxic	OECD 474	Mouse
	Mutagenicity	Not mutagenic	OECD 471	Salmonella typhimurium
	NOAEL (fertility) - estimate	> 700 mg/kg.d	Read across	Rat
	NOAEL (development, oral)	250 mg/kg bw/d		Rabbit
	Eye irritation	Irritant		Rabbit
	Skin irritation	Slightly irritant	OECD 404	Rabbit

Cinnamaldehyde	Skin irritation	Severely irritant		
	NOAEL (development, oral)	5 mg/kg bw/d	-----	Rat
	LD50 (oral)	2220 mg/kg bw	-----	Rat
	LD50 (dermal)	1260 mg/kg bw	-----	Rabbit
	Mutagenicity	Not mutagenic	-----	Salmonella typhimurium
	NOAEL (oral) - estimate	250 mg/kg bw/d		
	Genotoxicity - in vitro	Genotoxic	-----	
	Genotoxicity - in vivo	Not genotoxic	-----	
	Eye irritation	Moderately irritant	-----	Rabbit
	NOEL (carcinogenicity) - estimate	Not carcinogenic		
	Skin sensitisation	262 ug/cm2	OECD 429	Mouse
Isoeugenol	Skin sensitisation	498 ug/cm2	OECD 429	Mouse
	Skin irritation	Moderately irritant	-----	Human
	Skin irritation	Severely irritant		Rabbit
	NOEL (carcinogenicity, oral)	Not carcinogenic	-----	Rat
	Mutagenicity	Negative	-----	Salmonella typhimurium
	LC50 (inhalation) - estimate	1500 mg/m3		
	LD50 (dermal) - estimate	1912 mg/kg bw		
	LD50 (oral)	1560 mg/kg bw	-----	Rat

11.2. Information on other hazards

Endocrine disrupting properties : This product does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Regulation (EU) 2017/2100 or Regulation (EU) 2018/605 at levels of 0.1% or higher.

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): 3 mg/l. Calculated EC50 (waterflea): 12 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 : 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	:	This product does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Regulation (EU) 2017/2100 or Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7. Other adverse effects

Other adverse effects	:	Not applicable.

Ecological information:

Chemical name	Property		Method	Test animal
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 (algea)	> 2,6 mg/l	OECD 201	-----
	LC50 (fish)	1,3 mg/l	OECD 203	-----
	Log P(ow)	5,23		
	BCF	600		
dl-Limonene	IC50 (algea) - estimate	> 1,81 mg/l		
	EC50 (waterflea) - estimate	0,42 mg/l		
	LC50 (fish) - estimate	0,7 mg/l		
	LC50 (fish)	0,2 mg/l	-----	-----
	EC50 (waterflea)	17 mg/l	-----	Daphnia magna
	Log P(ow)	5,3		
	BCF	761		
Alpha-methyl-1,3-benzodioxole-5-propionaldehyde	EC50 (waterflea)	8,3 mg/l	OECD 202	Daphnia magna
	LC50 (fish)	> 4,6 mg/l	OECD 203	Oncorhynchus mykiss
	IC50 (algea)	28 mg/l	OECD 201	Pseudokirchnerella subcapitata
	Log P(ow)	2,4		
1-(2,6,6-Trimethyl-3-cyclohexen-1-yl)-2-buten-1-one	Log P(ow)	4,2		
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 (algea)	69,2 mg/l	OECD 201	Pseudokirchnerella subcapitata
	LC50 (fish)	0,205 mg/l	OECD 203	Brachydanio rerio
	Log P(ow)	2,64		
Pin-2(10)-ene	LC50 (fish)	0,502 mg/l	OECD 203	Pimephales promelas
	EC50 (waterflea)	1,25 mg/l	OECD 202	Daphnia magna
	Ultimate aerobic biodegradation (%)	76 %	OECD 301 D	
	IC50 (algea)	0,826 mg/l	OECD 201	Pseudokirchnerella subcapitata
	Log P(ow)	4,4		
Pin-2(3)-ene	Ultimate aerobic biodegradation (%)	62 %	OECD 301 B	
	LC50 (fish)	0,28 mg/l	-----	Pimephales promelas
	EC50 (waterflea)	1,44 mg/l	-----	Daphnia magna
	Log P(ow)	4,32		

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

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	:	(–)

:

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
ERG code	:	9L

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

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 used (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	:	The IMO International Code for construction and equipment of ships carrying dangerous chemicals in bulk.
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.
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.
Repr. 2	:	Reproductive toxicity, category 2.
STOT SE 3	:	Specific target organ toxicity after single exposure, category 3.
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.
H312	Harmful in contact with skin.
H332	Harmful if inhaled.
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.
H335	May cause respiratory irritation.
H361	Suspected of damaging fertility or the unborn child.
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.
H412	Harmful to aquatic life with long lasting effects.

Advice on any training appropriate for workers: none.

Country / Language code	:	EC / EN
Number format	:	"," used as decimal separator.

End of safety data sheet.

Print date : 2024-05-24