



# 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 LITTLE JOYA ROYAL TEA  
Product code : CRX767, AL65A

### 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 Kimya Sanayi ve Ticaret Limited Sirketi  
Küçükbakkalköy Mah. Dereboyu Cad. Brandium AVYM R5  
Blok D:82 Ataşehir / Istanbul, Turkey  
Telephone : +908503030587  
E-mail : msds@kemetyl.com  
Website : www.kemetyl.com

### 1.4. Emergency telephone number

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

TR - Telephone : +908503030587

(During office hours only)

## SECTION 2 HAZARDS IDENTIFICATION \*

### 2.1. Classification of the substance or mixture

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

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

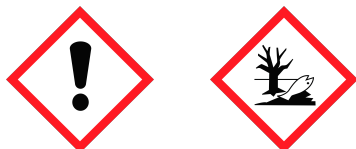
Physical/chemical hazards : Not classified as dangerous according to statutory EC-Directives. Combustible.

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

### 2.2. Label elements

Label elements (1272/2008/EC):

Hazard pictograms :



Signal word : Warning

H- and P-phrases	:	H315	Causes skin irritation.
		H319	Causes serious eye irritation.
		H317	May cause an allergic skin reaction.
		H410	Very toxic to aquatic life with long lasting effects.
		P101	If medical advice is needed, have product container or label at hand.
		P102	Keep out of reach of children.
		P280 gloves	Wear protective gloves.
		P273	Avoid release to the environment.
		P391	Collect spillage.

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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: alpha-Hexylcinnamaldehyde ; Linalyl acetate ; d-Limonene ; Linalool ; 1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one ; Citral ; Pin-2(10)-ene ; (Ethoxymethoxy)cyclododecane ; Geranyl acetate ; 6-Methyl-2-(4-methylcyclohex-3-enyl)hept-1,5-diene ; (E)-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.
alpha-Hexylcinnamaldehyde	10 - < 25	101-86-0	202-983-3		01-2119533092-50
Linalyl acetate	10 - < 20	115-95-7	204-116-4		01-2119454789-19
d-Limonene	5 - < 10	5989-27-5	227-813-5		01-2119529223-47
Linalool	5 - < 10	78-70-6	201-134-4		01-2119474016-42
1,3,4,6,7,8-Hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran	2,5 - < 5	1222-05-5	214-946-9		01-2119488227-29
Benzyl benzoate	1 - < 2,5	120-51-4	204-402-9		01-2119976371-33
1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	1 - < 2,5	54464-57-2	259-174-3		01-2119489989-04
Citral	1 - < 5	5392-40-5	226-394-6		01-2119462829-23
Pin-2(10)-ene	0,1 - < 1	127-91-3	204-872-5		01-2119519230-54
p-Mentha-1,4-diene	0,1 - < 1	99-85-4	202-794-6		01-2120780478-40
(Ethoxymethoxy)cyclododecane	0,1 - < 1	58567-11-6	261-332-1		01-2119971571-34
7-Methyl-3-methyleneocta-1,6-diene	0,1 - < 1	123-35-3	204-622-5		01-2119514321-56
Geranyl acetate	0,1 - < 1	105-87-3	203-341-5		01-2119973480-35
6-Methyl-2-(4-methylcyclohex-3-enyl)hept-1,5-diene	0,1 - < 1	495-61-4	610-461-5		
(E)-1-(2,6,6-trimethyl-1,3-cyclohexadien-1-yl)-2-buten-1-one	0,01 - < 0,1	23726-93-4	245-844-2		01-2120105798-49

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Substance name	Hazard Class	H-phrases	Pictograms	
alpha-Hexylcinnamaldehyde	Skin Sens. 1B; Aquatic Acute 1; Aquatic Chronic 2	H317; H400; H411	GHS07; GHS09	M (acute) = 1
Linalyl acetate	Skin Irrit. 2; Skin Sens. 1B; Eye Irrit. 2	H315; H317; H319	GHS07	
d-Limonene	Flam. Liq. 3; Asp. Tox. 1; Skin Irrit. 2; Skin Sens. 1B; Aquatic Acute 1; Aquatic Chronic 3	H226; H304; H315; H317; H400; H412	GHS02; GHS07; GHS08; GHS09	M (acute) = 1
Linalool	Skin Irrit. 2; Skin Sens. 1B; Eye Irrit. 2	H315; H317; H319	GHS07	
1,3,4,6,7,8-Hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran	Aquatic Acute 1; Aquatic Chronic 1	H400; H410	GHS09	M (chronic) = 1
Benzyl benzoate	Acute Tox. 4; Aquatic Acute 1; Aquatic Chronic 2	H302; H400; H411	GHS07; GHS09	M (acute) = 1
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
Citral	Skin Irrit. 2; Skin Sens. 1B; Eye Irrit. 2	H315; H317; H319	GHS07	
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
p-Mentha-1,4-diene	Flam. Liq. 3; Repr. 2; Aquatic Chronic 2	H226; H361; H411	GHS02; GHS08; GHS09	
(Ethoxymethoxy)cyclododecane	Skin Irrit. 2; Skin Sens. 1B; Aquatic Chronic 2	H315; H317; H411	GHS07; GHS09	
7-Methyl-3-methyleneocta-1,6-diene	Flam. Liq. 3; Asp. Tox. 1; Skin Irrit. 2; Eye Irrit. 2; Aquatic Acute 1; Aquatic Chronic 2	H226; H304; H315; H319; H400; H411	GHS02; GHS07; GHS08; GHS09	
Geranyl acetate	Skin Irrit. 2; Skin Sens. 1B; Aquatic Chronic 3	H315; H317; H412	GHS07	
6-Methyl-2-(4-methylcyclohex-3-enyl)hept-1,5-diene	Asp. Tox. 1; Skin Irrit. 2; Skin Sens. 1B	H304; H315; H317	GHS07; GHS08	
(E)-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**

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**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.



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Ingestion : Do not induce vomiting. Do rinse the mouth. Give one glass of water. Never give anything by mouth to an unconscious person. Consult a doctor if victim feels unwell.

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

### Effects and symptoms

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

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

Note to physicians : None known.

## SECTION 5 FIRE-FIGHTING MEASURES

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### 5.1. Extinguishing media

#### Extinguishing media

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

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

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

### 5.3. Advice for firefighters

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

## SECTION 6 ACCIDENTAL RELEASE MEASURES

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### 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.



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## 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/m<sup>3</sup>):

Chemical name	Country	TWA 8 hour (mg/m <sup>3</sup> )	STEL 15 min (mg/m <sup>3</sup> )	Comments	Source
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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
alpha-Hexylcinnamaldehyde	Inhalation	6,28 mg/m <sup>3</sup>			0,078 mg/m <sup>3</sup>
	Dermal	0,525 mg/kg bw		0,525 mg/kg bw/day	18,2 mg/kg bw/day
Linalyl acetate	Dermal	0,2362 mg/kg bw		0,2362 mg/kg bw/day	2,5 mg/kg bw/day
d-Limonene	Inhalation				2,75 mg/m <sup>3</sup>
	Dermal				66,7 mg/m <sup>3</sup>
Linalool	Inhalation				9,5 mg/kg bw/day
	Dermal	3 mg/kg bw		3 mg/kg bw/day	24,58 mg/m <sup>3</sup>
1,3,4,6,7,8-Hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran	Dermal				3,5 mg/kg bw/day
					28,85 mg/kg bw/day
Benzyl benzoate	Inhalation		102 mg/m <sup>3</sup>		5,29 mg/m <sup>3</sup>
	Dermal				5,1 mg/m <sup>3</sup>
1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	Inhalation				2,6 mg/kg bw/day
	Dermal			0,648 mg/kg bw/day	30 mg/m <sup>3</sup>
Citral	Inhalation				28,7 mg/kg bw/day
	Dermal				9 mg/m <sup>3</sup>
					1,7 mg/kg bw/day



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Pin-2(10)-ene	Inhalation Dermal			0,054 mg/kg bw/day	5,69 mg/m <sup>3</sup> 0,8 mg/kg bw/day
p-Mentha-1,4-diene	Inhalation Dermal				2,939 mg/m <sup>3</sup> 0,833 mg/kg bw/day
(Ethoxymethoxy)cyclododecane	Inhalation Dermal				23,5 mg/m <sup>3</sup> 3,3 mg/kg bw/day
Geranyl acetate	Inhalation Dermal				62,59 mg/m <sup>3</sup> 35,5 mg/kg bw/day
(E)-1-(2,6,6-trimethyl-1,3-cyclohexadien-1-yl)-2-buten-1-one	Inhalation Dermal				2,71 mg/m <sup>3</sup> 0,77 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
alpha-Hexylcinnamaldehyde	Inhalation	4,71 mg/m <sup>3</sup>			0,019 mg/m <sup>3</sup>
	Dermal	0,0787 mg/kg bw		0,0787 mg/kg bw/day	9,11 mg/kg bw/day
Linalyl acetate	Oral				0,056 mg/kg bw/day
	Dermal	0,2362 mg/kg bw		0,2362 mg/kg bw/day	1,25 mg/kg bw/day
d-Limonene	Inhalation				0,68 mg/m <sup>3</sup>
	Oral				0,2 mg/kg bw/day
Linalool	Inhalation				16,6 mg/m <sup>3</sup>
	Dermal	1.5 mg/kg bw		1.5 mg/kg bw/day	4,8 mg/kg bw/day
1,3,4,6,7,8-Hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran	Oral				4,8 mg/kg bw/day
	Dermal				1,25 mg/kg bw/day
Benzyl benzoate	Inhalation		25 mg/m <sup>3</sup>		4,33 mg/m <sup>3</sup>
	Dermal				2,49 mg/kg bw/day
1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	Oral		78 mg/kg bw		14,43 mg/kg bw/day
	Inhalation				1,3 mg/m <sup>3</sup>
Citral	Dermal			0,380 mg/kg bw/day	0,75 mg/kg bw/day
	Oral				1,25 mg/m <sup>3</sup>
Pin-2(10)-ene	Inhalation				1,3 mg/kg bw/day
	Dermal				0,4 mg/kg bw/day
p-Mentha-1,4-diene	Oral				9 mg/m <sup>3</sup>
	Inhalation				0,380 mg/kg bw/day
(Ethoxymethoxy)cyclododecane	Dermal				3 mg/kg bw/day
	Oral				1 mg/kg bw/day
	Inhalation				2,7 mg/m <sup>3</sup>
	Dermal				0,6 mg/kg bw/day
	Oral				1 mg/m <sup>3</sup>
	Inhalation				0,027 mg/kg bw/day
	Dermal				0,3 mg/kg bw/day
	Oral				0,3 mg/kg bw/day
	Inhalation				0,725 mg/m <sup>3</sup>
	Dermal				0,417 mg/kg bw/day
	Oral				0,417 mg/kg bw/day
	Inhalation				5,8 mg/m <sup>3</sup>
	Dermal				1,67 mg/kg bw/day



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Geranyl acetate	Oral Inhalation Dermal				1,67 mg/kg bw/day 15,4 mg/m3 17,75 mg/kg bw/day
(E)-1-(2,6,6-trimethyl-1,3-cyclohexadien-1-yl)-2-buten-1-one	Oral Inhalation Dermal Oral				8,9 mg/kg bw/day 0,67 mg/m3 0,38 mg/kg bw/day 0,38 mg/kg bw/day

Predicted no-effect concentration (PNEC):

Chemical name	Route of exposure	Fresh water	Marine water	
alpha-Hexylcinnamaldehyde	Water	0.001 mg/l		
	Sediment	3.2 mg/kg	0.064 mg/kg	
	Intermittent water			0,03 mg/l
	STP			10 mg/l
	Soil			0.398 mg/kg
Linalyl acetate	Oral			6.6 mg/kg food
	Water	0,011 mg/l	0,001 mg/l	
	Sediment	0,609 mg/kg	0,061 mg/kg	
	Intermittent water			0,11 mg/l
	STP			1 mg/l
d-Limonene	Soil			0,115 mg/kg
	Water	0.014 mg/l	0.0014 mg/l	
	Sediment	3.85 mg/kg	0.385 mg/kg	
	STP			1.8 mg/l
	Soil			0.763 mg/kg
Linalool	Oral			133 mg/kg food
	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
1,3,4,6,7,8-Hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran	Soil			0,327 mg/kg
	Oral			7,8 mg/kg food
	Water	0,0044 mg/l	0,0004 mg/l	
	Sediment	2 mg/kg	0,394 mg/kg	
	Intermittent water			0,047 mg/l
Benzyl benzoate	STP			1 mg/l
	Soil			0,31 mg/kg
	Oral			3,3 mg/kg food
	Water	0,017 mg/l	0,002 mg/l	
	Sediment	10,66 mg/kg	1,07 mg/kg	
1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	STP			100 mg/l
	Soil			2,12 mg/kg
	Water	0.0044 mg/l	0.00044 mg/l	
	Sediment	3.73 mg/kg	0.75 mg/kg	
	STP			10 mg/l
Citral	Soil			2.7 mg/kg
	Oral			26.7 mg/kg food
	Water	0,00678 mg/l	0,000678 mg/l	
	Sediment	0,125 mg/kg	0,0125 mg/kg	
	Intermittent water			0,0678 mg/l
Pin-2(10)-ene	STP			1,6 mg/l
	Soil			0,0209 mg/kg
	Water	0,001004 mg/l	0,0001 mg/l	



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p-Mentha-1,4-diene	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
(Ethoxymethoxy)cyclododecane	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
Geranyl acetate	Water	0,0016 mg/l	0,00016 mg/l	
	Sediment	2,35 mg/kg	0,235 mg/kg	
	Intermittent water			0,016 mg/l
	STP			100 mg/l
(E)-1-(2,6,6-trimethyl-1,3-cyclohexadien-1-yl)-2-buten-1-one	Soil			0,468 mg/kg
	Oral			33,3 mg/kg food
	Water	0,00372 mg/l	0.00037 mg/l	
	Sediment	0,442 mg/kg	0,442 mg/kg	
	Intermittent water			0,0372 mg/l
	STP			8 mg/l
	Soil			0,0859 mg/kg
	Water	0,00109 mg/l	0,0011 mg/l	
	Sediment	0,087 mg/kg	0,00867 mg/kg	
	STP			3,2 mg/l
	Soil			0,017 mg/kg
	Oral			6,67 mg/kg food

## 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 with side shields, in accordance with EN 166, when there is danger of possible eye contact.

## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

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





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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	: > 60 °C	Closed cup.
Flammability (solid, gas)	: Not applicable.	Liquid. See flashpoint.
Auto ignition temperature	: > 200 °C	
Boiling point/boiling range	: > 100 °C	
Melting point/melting range	: Not known.	
Explosive properties	: Not an explosive.	
Explosion limits (% in air)	: Not known.	Lower explosion limit in air (%): 0,7 ( Linalyl acetate ) Upper explosion limit in air (%): 9 ( Citral )
	:	Does not contain oxidizing substances.
Oxidising properties	: Not applicable.	
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

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## 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: 21 %. ATE: > 5 mg/l. Low toxicity. Not classified - based on available data, the classification criteria are not met.
- Corrosion/irritation : Not classified - based on available data, the classification criteria are not met.
- Sensitisation : Does not contain substances classified as respiratory sensitiser. Not classified - based on available data, the classification criteria are not met.
- Carcinogenicity : Not expected to be carcinogenic. Not classified - based on available data, the classification criteria are not met.
- Mutagenicity : 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 : Irritant. May cause redness. Prolonged contact may dry out and defat the skin.
- Sensitisation : May cause sensitisation by skin contact. May produce an allergic reaction.
- Mutagenicity : Does not contain mutagenic substances. Not classified - based on available data, the classification criteria are not met.

### Eye contact

- Corrosion/irritation : Irritant.

### Ingestion

- Acute toxicity : Calculated LD50: > 5000 mg/kg.bw. Ingredients of unknown toxicity: < 1 %. ATE: > 2000 mg/kg.bw. Low toxicity. Not classified - based on available data, the classification criteria are not met.
- Aspiration : Contains a substance/substances with an aspiration hazard. Not classified - based on available data, the classification criteria are not met.
- Corrosion/irritation : May cause a feeling of sickness, vomiting and diarrhoea.
- Carcinogenicity : Not expected to be carcinogenic. Not classified - based on available data, the classification criteria are not met.
- Mutagenicity : 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
alpha-Hexylcinnamaldehyde	NOAEL (development, oral)	100 mg/kg bw/d	OECD 421	Rat
	Genotoxicity - in vivo	Not genotoxic	OECD 474	
	Genotoxicity - in vitro	Not genotoxic	OECD 476	
	Mutagenicity	Negative	OECD 471	Salmonella typhimurium
	Eye irritation	Non-irritant		Rabbit
	NOAEL (oral) - estimate	30 mg/kg bw/d	Read across	Rat
	LD50 (dermal)	> 3000 mg/kg bw	OECD 402	Rabbit
	LC50 (inhalation)	> 5000 mg/m3	OECD 403	Rat
	LD50 (oral)	> 2450 mg/kg bw	OECD 401	Rat
	Skin sensitisation	2372 ug/cm2	OECD 429	Mouse
	Skin irritation	Moderately irritant	OECD 404	Rabbit
	NOAEL (dermal)	25 mg/kg bw/d		Rat



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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	
	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		
	d-Limonene	Skin sensitisation	5500 ug/cm2	OECD 429	Mouse
		NOAEL (development, oral)	600 mg/kg bw/d		Rat
Skin irritation		Irritant	-----	-----	
LD50 (dermal)		> 2000 mg/kg bw	-----	Rabbit	
LD50 (oral)		> 2000 mg/kg bw	OECD 423	Rat	
Genotoxicity - in vitro		Not genotoxic			
NOAEL (oral)		150 mg/kg bw/d		Rat	
NOAEL (development, oral)		365 mg/kg bw/d	-----	Rat	
Eye irritation		Non-irritant	OECD 405	Rabbit	
Skin sensitisation		12650 ug/cm2	OECD 429	Mouse	
Linalool	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	
	Skin irritation	Non-irritant	-----	Rabbit	
1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	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	



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Citral	LC50 (inhalation) - estimate	> 22360 mg/m3	Read across		
	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	
Pin-2(10)-ene	NOAEL (development, oral)	200 mg/kg bw/d	OECD 421	Rat	
	Skin sensitisation	Sensitizing.	OECD 429	Mouse	
	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	
	(Ethoxymethoxy)cyclododecane	LD50 (oral)	> 5000 mg/kg bw	OECD 401	Rat
		LD50 (dermal)	> 5000 mg/kg bw	OECD 402	Rabbit
		Mutagenicity	Negative	OECD 471	Salmonella typhimurium
		Genotoxicity - in vitro	Not genotoxic	OECD 476	Chinese Hamster
		Skin irritation	Irritant	OECD 404	Rabbit
		Eye irritation	Non-irritant	OECD 405	Rabbit
NOAEL (oral)		1000 mg/kg bw/d	OECD 422	Rat	
NOAEL (development, oral)		1000 mg/kg bw/d	OECD 422	Rat	
NOAEL (fertility, oral)		1000 mg/kg bw/d	OECD 422	Rat	
Skin sensitisation		Sensitizing.	OECD 429	Mouse	
Geranyl acetate		Skin irritation	Moderately irritant		Guinea pig
		Skin sensitisation	Sensitizing.	-----	-----
		NOEL (carcinogenicity) - estimate	> 2000 mg/kg.d	Read across	Rat
		NOAEL (dermal) - estimate	1000 mg/kg bw/d	Read across	Mouse
	LD50 (dermal)	> 5460 mg/kg bw		Rabbit	
	LD50 (oral)	6330 mg/kg bw	-----	Rat	
	Mutagenicity	Negative	OECD 471	-----	
	(E)-1-(2,6,6-trimethyl-1,3-cyclohexadien-1-yl)-2-buten-1-one	LD50 (dermal) - estimate	> 2150 mg/kg bw	Read across	Rat
		LD50 (oral)	> 2000 mg/kg bw	-----	Rat
		Skin irritation	Irritant	-----	-----
		Eye irritation - estimate	Non-irritant	Read across	Rabbit
		Skin sensitisation	305 ug/cm2	OECD 429	Mouse
		NOAEL (oral) - estimate	30 mg/kg bw/d	Read across	Rat



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	NOAEL (development) - estimate	400 mg/kg.d	Read across	Rat
	Mutagenicity	Negative	OECD 471	Salmonella typhimurium
	Genotoxicity - in vitro	Not genotoxic	OECD 476	-----

## 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 : Very toxic to aquatic organisms. Calculated LC50 (fish): 3 mg/l. Calculated EC50 (waterflea): 2 mg/l.  
I. 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 : Not applicable.

### 12.7. Other adverse effects

Other adverse effects : Not applicable.

Ecological information:

Chemical name	Property		Method	Test animal
alpha-Hexylcinnamaldehyde	NOEC (fish)	0,93 mg/l	OECD 203	Pimephales promelas
	LC50 (fish)	1,7 mg/l	OECD 203	Pimephales promelas
	Ultimate aerobic biodegradation (%)	97 %	OECD 301 F	
	LC50 (algae)	> 0,32 mg/l	OECD 201	Desmodesmus subspicatus
alpha-Hexylcinnamaldehyde d-Limonene	Log P(ow)	5,3		
	LC50 (fish)	0,72 mg/l	OECD 203	Pimephales promelas
	EC50 (waterflea)	0,307 mg/l	OECD 202	Daphnia magna
	Ultimate aerobic biodegradation (%)	71,4 %	OECD 301 B	
	NOEC (waterflea) - chronic	0,08 mg/l.d	OECD 211	Daphnia magna



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d-Limonene 1,3,4,6,7,8-Hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran	IC50 (alga)	0,32 mg/l	OECD 201	Pseudokirchnerella subcapitata
	NOEC (fish)	0,059 mg/l.d		Pimephales promelas
	Log P(ow)	4,38		
	Ultimate aerobic biodegradation (%)	2 %	OECD 301 B	
	IC50 (alga)	> 0,85 mg/l	OECD 201	Pseudokirchnerella subcapitata
	NOEC (waterflea) - chronic	0,111 mg/l.d	OECD 202	Daphnia magna
	LC50 (fish)	1,36 mg/l	OECD 204	Lepomis macrochirus
	NOEC (fish)	0,068 mg/l.d	OECD 210	Pimephales promelas
	EC50 (waterflea)	0,47 mg/l	-----	-----
	Log P(ow)	5,9		
1,3,4,6,7,8-Hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran 1,3,4,6,7,8-Hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran Benzyl benzoate	BCF	1584		
	IC50 (alga)	0,475 mg/l	OECD 201	Pseudokirchnerella subcapitata
	LC0 (fish)	1,9 mg/l	OECD 203	Brachydanio rerio
	LC100 (fish)	2,84 mg/l	OECD 203	Brachydanio rerio
	Ultimate aerobic biodegradation (%)	94 %	OECD 301 F	
	LC50 (fish)	2,32 mg/l	OECD 203	Brachydanio rerio
	EC50 (waterflea)	3,09 mg/l	OECD 202	Daphnia magna
	NOEC (waterflea) - chronic	0,258 mg/l.d	OECD 211	Daphnia magna
	Log P(ow)	3,97		
	BCF	24		
Benzyl benzoate Benzyl benzoate 1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	EC50 (waterflea)	1,38 mg/l	OECD 202	-----
	IC50 (alga)	> 2,6 mg/l	OECD 201	-----
	LC50 (fish)	1,3 mg/l	OECD 203	-----
	Log P(ow)	5,23		
	BCF	600		
	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 (alga)	0,826 mg/l	OECD 201	Pseudokirchnerella subcapitata
	Log P(ow)	4,4		
Pin-2(10)-ene 7-Methyl-3-methyleneocta-1,6-diene	Ultimate aerobic biodegradation (%)	76 %	OECD 301 D	
	LC50 (fish) - estimate	> 100 mg/l	OECD 203	Cyprinus carpio
	EC50 (waterflea)	1,47 mg/l	OECD 202	Daphnia magna
	IC50 (alga)	0,342 mg/l	OECD 201	Pseudokirchnerella subcapitata
	Log P(ow)	5,285		
	BCF	739		
	7-Methyl-3-methyleneocta-1,6-diene			
	7-Methyl-3-methyleneocta-1,6-diene			

## SECTION 13 DISPOSAL CONSIDERATIONS



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## 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

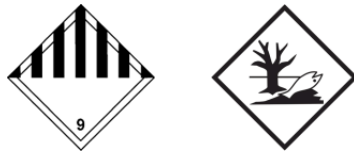
Transport name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ( alpha-Hexylcinnamaldehyde ; 1,3,4,6,7,8-Hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran )

Transport name (IMDG, IATA) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ( alpha-Hexylcinnamaldehyde ; 1,3,4,6,7,8-Hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran )

### 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  
Packaging group : III



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## 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 (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





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SU	: Sector of Use
TWA/STEL	: Time-Weighted Average/Short Term Exposure Limit
UN	: United Nations
UFI	: Unique formula identifier
VOC	: Volatile Organic Compounds
vPvB	: Very Persistent and Very Bioaccumulative

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

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

Skin Irrit. 2	: Calculation method.
Eye Irrit. 2	: Calculation method.
Skin Sens. 1/1A/1B	: Calculation method.
Aquatic Chronic 2	: Calculation method.
Aquatic Acute 1	: 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.
Asp. Tox. 1	: Aspiration hazard, category 1.
Aquatic Chronic 1	: Hazardous to the aquatic environment — Chronic category 1.
Aquatic Chronic 2	: Hazardous to the aquatic environment — Chronic category 2.
Aquatic Chronic 3	: Hazardous to the aquatic environment — Chronic category 3.
Aquatic Acute 1	: Hazardous to the aquatic environment — Acute category 1.

Full text of H-phrases mentioned in section 3:

H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
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.

Number format : ", " used as decimal separator.

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End of safety data sheet.

Print date : 2022-07-06