



**Kemetyl**

# Safety data sheet

According to Regulation (EU) No 2015/830

## SECTION 1 IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1. Product identifier

Product name : SHELL AIRFRESHENER FRUIT COCKTAIL  
Product code : CRX780, AL53B

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

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

### 1.3. Details of the supplier of the safety data sheet

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

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:



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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 ; 2,6-Dimethylhept-5-enal ; Citral ; Ethyl 2,3-epoxy-3-phenylbutyrate ; 2,4-Dimethylcyclohex-3-ene-1-carbaldehyde ; 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

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### 3.2. Mixtures

Product description : Mixture.

Information on hazardous substances:

Substance name	Concentration (w/w) (%)	CAS nr.	EC number	Remark	REACH nr.
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
Allyl hexanoate	1 - < 5	123-68-2	204-642-4		01-2119983573-26
2-tert-Butylcyclohexyl acetate	1 - < 2,5	88-41-5	201-828-7		
Undecan-4-olide	1 - < 5	104-67-6	203-225-4		01-2119959333-34
2,6-Dimethylhept-5-enal	0,1 - < 1	106-72-9	203-427-2		
3,7-Dimethylocta-1,3,6-triene	0,1 - < 1	13877-91-3	237-641-2		
Citral	0,1 - < 1	5392-40-5	226-394-6		
Ethyl 2,3-epoxy-3-phenylbutyrate	0,1 - < 1	77-83-8	201-061-8		
Diphenyl ether	0,1 - < 1	101-84-8	202-981-2		
2,4-Dimethylcyclohex-3-ene-1-carbaldehyde	0,1 - < 1	68039-49-6	268-264-1		
4-Methyl-3-decen-5-ol	0,1 - < 1	81782-77-6	279-815-0		
4-Hydroxy-2,5-dimethylfuran-2(3H)-one	0,1 - < 1	3658-77-3	222-908-8		
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; GHS07; GHS07
2-Phenylethanol	Acute Tox. 4; Eye Irrit. 2	H302; H319	GHS07; GHS07

Product name : Shell Airfreshener fruit cocktail

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Allyl hexanoate	Acute Tox. 3; Acute Tox. 3; Acute Tox. 3; Aquatic Acute 1; Aquatic Chronic 3	H301; H311; H331; H400; H412	GHS06; GHS06; GHS06; GHS09	M (acute) = 1
2-tert-Butylcyclohexyl acetate	Aquatic Chronic 2	H411	GHS09	
Undecan-4-olide	Aquatic Chronic 3	H412		
2,6-Dimethylhept-5-enal	Skin Sens. 1B	H317	GHS07	
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; GHS08; GHS07; GHS09; GHS09	M (acute) = 1
Citral	Skin Irrit. 2; Skin Sens. 1B; Eye Irrit. 2	H315; H317; H319	GHS07; GHS07; GHS07	
Ethyl 2,3-epoxy-3-phenylbutyrate	Skin Sens. 1B; Aquatic Chronic 2	H317; H411	GHS07; GHS09	
Diphenyl ether	Eye Irrit. 2	H319	GHS07	
2,4-Dimethylcyclohex-3-ene-1-carbaldehyde	Skin Irrit. 2; Skin Sens. 1B; Eye Irrit. 2; Aquatic Chronic 2	H315; H317; H319; H411	GHS07; GHS07; GHS07; GHS09	
4-Methyl-3-decen-5-ol	Aquatic Acute 1; Aquatic Chronic 2	H400; H411	GHS09; GHS09	M (acute) = 1
4-Hydroxy-2,5-dimethylfuran-2(3H)-one	Acute Tox. 4; Skin Corr. 1B; Skin Sens. 1A; Eye Dam. 1	H302; H314; H317; H318	GHS07; GHS05; GHS07; GHS05	
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; GHS07; GHS09	

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

Reference is made to chapter 16 for full text of each relevant H phrase.

## SECTION 4 FIRST-AID MEASURES

### 4.1. Description of first aid measures

First aid measures

- Inhalation : Not applicable under normal conditions of use. Consult a doctor if victim feels unwell.
- Skin contact : Take off contaminated clothing. Wash off skin with plenty of water and soap before product dries up. Consult a doctor if irritation occurs.
- Eye contact : Wash out with (lukewarm) water. Remove contact lenses. Consult a doctor if irritation persists.
- Ingestion : Do not induce vomiting. Do rinse the mouth. Give one glass of water. Never give anything by mouth to an unconscious person. Consult a doctor if victim feels unwell.

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

Effects and symptoms

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

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

Note to physicians : None known.

## SECTION 5 FIRE-FIGHTING MEASURES



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## 5.1. Extinguishing media

Extinguishing media

- Suitable : Carbondioxide (CO<sub>2</sub>). Foam. Dry chemical. Water fog.  
Not suitable : Water jet.

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

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

## 5.3. Advice for firefighters

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

## SECTION 6 ACCIDENTAL RELEASE MEASURES

### 6.1. Personal precautions, protective equipment and emergency procedures

- Personal precautions : Danger of slipping. Clean up spills immediately. Wear shoes with non-slip soles. Avoid contact with spilled or released material. Vapours are heavier than air. Build up (of gasses) in low areas involves risk of suffocation.

### 6.2. Environmental precautions

- Environmental precautions : Avoid release of product into sewers, surface water and/or ground water. In case of large spills: contain with dike.  
Other information : Notify authorities if any exposure to the general public or the environment occurs or is likely to occur.

### 6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Collect spilled material in containers. Dispose at an authorised waste collection point. Wash away remainder with plenty of water and soap.

### 6.4. Reference to other sections

- Reference to other sections : See also section 8.

## SECTION 7 HANDLING AND STORAGE

### 7.1. Precautions for safe handling

- Handling : Handle in accordance with good occupational hygiene and safety practices in well-ventilated areas. Keep away from sources of ignition — No smoking. Avoid contact with skin and eyes. Avoid splashing. Wear protective clothing.

### 7.2. Conditions for safe storage, including any incompatibilities

- Storage : Keep frost-free, in a cool, dry and well-ventilated place (< 35 °C). Keep away from oxidizing agents.  
Recommended packaging : Keep only in the original container.  
Non recommended packaging : None known.

### 7.3. Specific end use(s)



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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
Diphenyl ether 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		16,5 mg/m <sup>3</sup>		2,8 mg/m <sup>3</sup>
2-Phenylethanol	Dermal	3 mg/kg bw	5 mg/kg bw	3 mg/kg bw/day	2,5 mg/kg bw/day
	Inhalation				59,9 mg/m <sup>3</sup>
Allyl hexanoate	Dermal				21,2 mg/kg bw/day
	Inhalation				15 mg/m <sup>3</sup>
Undecan-4-olide	Dermal				4,3 mg/kg bw/day
	Inhalation				19 mg/m <sup>3</sup>
Citral	Dermal				5,38 mg/kg bw/day
	Inhalation				9 mg/m <sup>3</sup>
Ethyl 2,3-epoxy-3-phenylbutyrate	Dermal				1,7 mg/kg bw/day
	Inhalation				2,45 mg/m <sup>3</sup>
Diphenyl ether	Dermal				0,7 mg/kg bw/day
	Inhalation	14 mg/m <sup>3</sup>		7 mg/m <sup>3</sup>	59 mg/m <sup>3</sup>
2,4-Dimethylcyclohex-3-ene-1-carbaldehyde	Dermal				25 mg/kg bw/day
	Inhalation				0,44 mg/m <sup>3</sup>
4-Methyl-3-decen-5-ol	Dermal				0,125 mg/kg bw/day
	Inhalation				0,88 mg/m <sup>3</sup>
	Dermal			0,05 mg/kg bw/day	0,5 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	2,5 mg/kg bw	15 mg/kg bw/day	1,25 mg/kg bw/day
	Inhalation		4,1 mg/m <sup>3</sup>		0,7 mg/m <sup>3</sup>
2-Phenylethanol	Oral		1,2 mg/kg bw		0,2 mg/kg bw/day
	Inhalation				17,7 mg/m <sup>3</sup>
Allyl hexanoate	Dermal				12,7 mg/kg bw/day
	Oral		5,1 mg/kg bw		5,1 mg/kg bw/day
Undecan-4-olide	Oral				2,1 mg/kg bw/day
	Inhalation				3,7 mg/m <sup>3</sup>
	Dermal				2,1 mg/kg bw/day
	Inhalation				4,68 mg/m <sup>3</sup>

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Citral	Dermal Oral				2,7 mg/kg bw/day 2,7 mg/kg bw/day
Ethyl 2,3-epoxy-3-phenylbutyrate	Dermal Inhalation Oral				1 mg/kg bw/day 2,7 mg/m3 0,6 mg/kg bw/day
2,4-Dimethylcyclohex-3-ene-1-carbaldehyde	Inhalation Dermal Oral				0,61 mg/m3 0,35 mg/kg bw/day 0,35 mg/kg bw/day
4-Methyl-3-decen-5-ol	Inhalation Dermal Oral			0,02 mg/kg bw/day	0,108 mg/m3 0,062 mg/kg bw/day 0,062 mg/kg bw/day 0,22 mg/m3 0,25 mg/kg bw/day 0,06 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
2-Phenylethanol	Oral			7,8 mg/kg food
	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
Allyl hexanoate	Soil			0,164 mg/kg
	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
Undecan-4-olide	Soil			0,000825 mg/kg
	Oral			47,56 mg/kg food
	Water	0,0058 mg/l	0,00058 mg/l	
	Sediment	0,628 mg/kg	0,063 mg/kg	
	Intermittent water			0,058 mg/l
Citral	STP			80 mg/l
	Soil			0,122 mg/kg
	Oral			66,7 mg/kg food
	Water	0,00678 mg/l	0,000678 mg/l	
	Sediment	0,125 mg/kg	0,0125 mg/kg	
Ethyl 2,3-epoxy-3-phenylbutyrate	Intermittent water			0,0678 mg/l
	STP			1,6 mg/l
	Soil			0,0209 mg/kg
	Water	0,0084 mg/l	0,0084 mg/l	
	Sediment	0,214 mg/kg	0,0214 mg/kg	
Diphenyl ether	Intermittent water			0,084 mg/l
	STP			10 mg/l
	Soil			0,0378 mg/kg
	Oral			23,3 mg/kg food
	Water	0 mg/l	0 mg/l	
	Sediment	0,093 mg/kg	0,009 mg/kg	
	Intermittent water			0,017 mg/l



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2,4-Dimethylcyclohex-3-ene-1-carbaldehyde	STP			10 mg/l
	Soil			0,018 mg/kg
4-Methyl-3-decen-5-ol	Water	0,0075 mg/l	0,00075 mg/l	
	Sediment	0,226 mg/kg	0,0226 mg/kg	
	Intermittent water			0,075 mg/l
	STP			10 mg/l
4-Methyl-3-decen-5-ol	Soil			0,0408 mg/kg
	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

## 8.2. Exposure controls

Engineering measures : Comply with standard precautionary measures for working with chemicals.  
 Hygienic measures : When using do not eat, drink or smoke.

Personal protective equipment:

The efficiency of personal protective equipment depends among other things on temperature and degree of ventilation. Always get professional advice for the particular local situation.



- Body protection : Wear appropriate protective clothing, overalls or suit, and similar boots in accordance with EN 365/367 resp. 345. Suitable material: laminated film. Indication of permeation breakthrough time: 4 hours.
- Respiratory protection : Take care of sufficient ventilation. Wear suitable respiratory protection in case of large scale exposure. Suitable: gas filter type A (brown), class I or higher on e.g. a facemask in accordance with EN 140.
- Hand protection : Wear appropriate safety gloves in accordance with EN 374. Suitable material: laminated film. ± 0,5 mm. Indication of permeation breakthrough time: 4 hours.
- Eye protection : Wear appropriate safety glasses 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

Appearance	: Liquid.	Impregnated material.
Colour	: Light yellow.	
Odour	: Perfumed.	
Odour threshold	: Not known.	
pH	: Not applicable.	Waterfree product.
Solubility in water	: Not soluble.	
Partition coefficient (n-octanol/water)	: Not known.	Not measured. Not relevant for mixtures.
Flash point	: 80 °C	
Flammability (solid, gas)	: Not applicable.	Liquid. See flashpoint.
Auto ignition temperature	: > 260 °C	
Boiling point/boiling range	: > 100 °C	
Melting point/melting range	: < 0 °C	
Explosive properties	: None known.	Does not contain explosives.
Explosion limits (% in air)	: Not known.	Lower explosion limit in air (%): 0,9 ( Linalool )



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	:	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.
Vapour pressure (20°C)	:	Not known.
Vapour density (20°C)	:	> 1 (air = 1)
Relative density (20°C)	:	1 g/ml
Evaporation rate	:	< 1 (n-butyl acetate = 1)

## 9.2. Other information

Other information : Not relevant.

## SECTION 10 STABILITY AND REACTIVITY

### 10.1. Reactivity

Reactivity : See sub-sections below.

### 10.2. Chemical stability

Stability : Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

Reactivity : No other hazardous reactions known.

### 10.4. Conditions to avoid

Conditions to avoid : See section 7.

### 10.5. Incompatible materials

Materials to avoid : Keep away from oxidizing agents.

### 10.6. Hazardous decomposition products

Hazardous decomposition products : Not known.

## SECTION 11 TOXICOLOGICAL INFORMATION

### 11.1. Information on 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





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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.
<b>Eye contact</b>	
Corrosion/irritation	: Slight irritation possible. Not classified - based on available data, the classification criteria are not met.
<b>Ingestion</b>	
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	
	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	
Citral	Skin sensitisation	Sensitizing.	OECD 429	Mouse	
	NOAEL (fertility, oral)	> 1000 mg/kg bw/d	OECD 421	Rat	
	Genotoxicity - in vivo	Negative	OECD 474	Mouse	
	Eye irritation	Slightly irritant	OECD 405	Rabbit	
	Skin irritation	Moderately irritant		Rabbit	
	Skin irritation	Irritant		Human	
	Skin sensitisation	Sensitizing.	OECD 406	Guinea pig	
	NOAEL (developmental toxicity, inh.)	423 mg/m3	----	Rat	
	NOEL (carcinogenicity, oral)	> 100 mg/kg bw/d	OECD 453	Rat	
	Mutagenicity	Negative	OECD 471		



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Ethyl 2,3-epoxy-3-phenylbutyrate	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
	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
2,4-Dimethylcyclohex-3-ene-1-carbaldehyde	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
	Skin sensitisation	5900 ug/cm2		
	LD50 (oral)	> 2000 mg/kg bw		Rat
	LD50 (dermal)	> 2000 mg/kg bw		Rabbit
	Mutagenicity	Not mutagenic		Salmonella typhimurium
	LD50 (oral)	1660 mg/kg bw	OECD 401	Rat
4-Hydroxy-2,5-dimethylfuran-2(3H)-one				
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	----	----

## SECTION 12 ECOLOGICAL INFORMATION

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### 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%.



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## 12.6. Other adverse effects

Other information : 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 into the environment, in drains or in water courses.

European waste catalogue : Dispose hazardous waste in accordance with Directive 91/689/EEC under acknowledgement of a waste code according to Commission Decision 2000/532/EC to an official chemical waste depot.

Local legislation : Disposal should be in accordance with applicable regional, national, and local laws and regulations. Local regulations may be more stringent than regional or national requirements and must be complied with.

## SECTION 14 TRANSPORT INFORMATION

### 14.1. UN number 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 2015/830 (REACH), Regulation (EC) No 1272/2008 (CLP) and other regulations.

### 15.2. Chemical safety assessment



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Chemical safety assessment : Not applicable.

## SECTION 16 OTHER INFORMATION \*

### 16.1. Other information

The information in this safety data sheet is compiled in compliance with Regulation (EU) No 2015/830 dated 28 May 2015 and accurate to the best of our knowledge and experience at the date of issue specified. It is the user's obligation to use this product safely and to comply with all applicable laws and regulations concerning the use of the product. This safety data sheet complements the technical information sheets but does not replace them and offers no warranty with regard to product properties.

Users are also forewarned for any hazards involved when the product is used for other purposes than those for which it is designed.

Changed or new information with regard to the previous release is indicated with an asterisk (\*).

List of abbreviations and acronyms that could be (but not necessarily are) used in this safety data sheet:

ADR	: European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	: Acute Toxicity Estimate
CLP	: Classification, Labeling & Packaging
CMR	: Carcinogenic, Mutagenic or toxic for Reproduction
EEC	: European Economic Community
GHS	: Globally Harmonized System of Classification and Labelling of Chemicals
IATA	: International Air Transport Association
IBC code	: International Bulk Chemical Code
IMDG	: International Maritime Dangerous Goods Code
LD50/LC50	: Lethal Dose/Concentration for 50% of a population
MAC	: Maximum Allowable Concentration
MARPOL	: International Convention for the Prevention of Pollution From Ships
NO(A)EL	: No Observed (Adverse) Effect Level
OECD	: Organisation for Economic Co-operation and Development
PBT	: Persistent, Bioaccumulative and Toxic
PC	: Chemical product category
PT	: Product type
REACH	: Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	: Regulations concerning the International Carriage of Dangerous Goods by Rail
STP	: Sewage Treatment Plant
SU	: Sector of Use
TWA/STEL	: Time-Weighted Average/Short Term Exposure Limit
UN	: United Nations
VOC	: Volatile Organic Compounds
vPvB	: Very Persistent and Very Bioaccumulative

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

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

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

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 Irrit. 2	: Eye irritation, category 2.
Skin Sens. 1/1A/1B	: Skin sensitization, category 1/1A/1B.



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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.  
H304 May be fatal if swallowed and enters airways.  
H311 Toxic in contact with skin.  
H314 Causes severe skin burns and eye damage.  
H315 Causes skin irritation.  
H317 May cause an allergic skin reaction.  
H319 Causes serious eye irritation.  
H331 Toxic if inhaled.  
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.

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End of safety data sheet.

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