



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

**1.1. Product identifier**

Product name : ALEFIA REED DIFFUSER JARDIN DES PLANTES  
Product code : ALE-053

**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 : Dovox B.V.  
Computerweg 3  
3542 DP UTRECHT, The Netherlands  
Telephone : +31-30-7116 824  
Fax : +31-30-3100 141  
E-mail : info@dovox.nl  
Website : www.dovox.nl

**1.4. Emergency telephone number**

EMERGENCY TELEPHONE NUMBER, for DOCTORS/FIRE BRIGADE/POLICE only:  
NL - Telephone : +31-30-7116 824 (During office hours only)  
EMERGENCY TELEPHONE NUMBER (for DOCTORS only): (24/7)


**SECTION 2 HAZARDS IDENTIFICATION**

**2.1. Classification of the substance or mixture**

CLP classification : Flammable liquid, category 3. Hazardous to the aquatic environment — Chronic category 3. (1272/2008/EC)  
Human health hazards : May produce an allergic reaction.  
Physical/chemical hazards : Flammable.  
Environmental hazards : Harmful to aquatic life with long lasting effects.

**2.2. Label elements**

Label elements (1272/2008/EC):

Hazard pictograms : 

Signal word : Warning

H- and P-phrases : H226 Flammable liquid and vapour.  
H412 Harmful to aquatic life with long lasting effects.  
EUH208 Contains ... May produce an allergic reaction. Reference is made to additional labelling for full text of EUH208\*.  
P102 Keep out of reach of children.  
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P501 Dispose of contents/container to an official chemical waste depot.  
P273 Avoid release to the environment.

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 : H412 Harmful to aquatic life with long lasting effects.  
EUH208 Contains ... May produce an allergic reaction. Reference is made to additional labelling for full text of EUH208\*.

P102 Keep out of reach of children.

Additional labelling (for all packaging sizes)

: \* Contains 2-(4-tert-butylbenzyl)propionaldehyde ; 1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one ; Alpha-methyl-1,3-benzodioxole-5-propionaldehyde ; Benzyl salicylate ; Citronellol ; Linalool . May produce an allergic reaction.

### 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.
(2-Methoxymethylethoxy)propanol	50 - 75	34590-94-8	252-104-2	MAC	
Ethanol	10 - < 20	64-17-5	200-578-6		
Oxydipropanol	5 - < 10	25265-71-8	246-770-3	MAC	
2-(4-tert-butylbenzyl)propionaldehyde	0,1 - < 1	80-54-6	201-289-8		01-2119485965-18
(Z)-3-hexenyl salicylate	0,25 - < 1	65405-77-8	265-745-8		01-2119987320-37
1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	0,25 - < 1	54464-57-2	259-174-3		01-2119489989-04
Alpha-methyl-1,3-benzodioxole-5-propionaldehyde	0,1 - < 1	1205-17-0	214-881-6		01-2120740119-58
Benzyl acetate	0,1 - < 1	140-11-4	205-399-7		01-2119638272-42
Benzyl salicylate	0,1 - < 1	118-58-1	204-262-9		01-2119969442-31
Citronellol	0,1 - < 1	106-22-9	203-375-0		01-2119453995-23
Linalool	0,1 - < 1	78-70-6	201-134-4		01-2119474016-42

Substance name	Hazard Class	H-phrases	Pictograms	
(2-Methoxymethylethoxy)propanol	----	----	----	
Ethanol	Flam. Liq. 2; Eye Irrit. 2	H225; H319	GHS02; GHS07	H319 : C >= 50 %
Oxydipropanol	----	----	----	
2-(4-tert-butylbenzyl)propionaldehyde	Aquatic Chronic 2; Skin Irrit. 2; Skin Sens. 1B; Acute Tox. 4; Repr. 2	H302; H315; H317; H411; H361f	GHS07; GHS08; GHS09	
(Z)-3-hexenyl salicylate	Aquatic Acute 1; Aquatic Chronic 1	H400; H410	GHS09	M (acute) = 1 M (chronic) = 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
Alpha-methyl-1,3-benzodioxole-5-propionaldehyde	Skin Sens. 1B; Aquatic Chronic 2	H317; H411	GHS07; GHS09	
Benzyl acetate	Aquatic Chronic 3	H412	----	
Benzyl salicylate	Skin Sens. 1; Eye Irrit. 2; Aquatic Chronic 3	H317; H319; H412	GHS07; GHS09	
Citronellol	Eye Irrit. 2; Skin Irrit. 2; Skin Sens. 1B	H319; H317; H315	GHS07	
Linalool	Skin Irrit. 2; Eye Irrit. 2; Skin Sens. 1B	H315; H317; H319	GHS07	

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 produce an allergic reaction. May cause dry skin.
- Eye contact : May cause stinging of eyes and redness.
- Ingestion : May cause a feeling of sickness, vomiting and diarrhoea.

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

Note to physicians : None known.

## SECTION 5 FIRE-FIGHTING MEASURES

### 5.1. Extinguishing media

Extinguishing media

- Suitable : Carbondioxide (CO2). Alcohol resistant 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. Keep away from sources of ignition — No smoking. 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. Absorb residues in sand or other inert material. 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. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Electrostatic discharge may cause fire. Ensure electrical continuity by bonding and grounding (earthing) all equipment. Avoid contact with skin and eyes. Avoid splashing. Wear protective clothing.

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

Storage : Keep in a cool, dry and well-ventilated place (< 35 °C). Keep away from oxidizing agents. Protect from sunlight.  
Recommended packaging : Keep only in the original container.  
Non recommended packaging : Steel (except stainless steel).

**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
---------------	---------	---------------------------------	----------------------------------	----------	--------



# SAFETY DATA SHEET

According to Regulation (EU) No 2015/830

(2-Methoxymethylethoxy)propanol	GB	308	-	Skin	
(2-Methoxymethylethoxy)propanol	EC	308	-	Skin	
Ethanol	GB	1920	-		
Ethanol		260	1900		Mac: NL
Oxydipropanol		67			MAC: DE
Benzyl acetate		5			MAC: LT

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
(2-Methoxymethylethoxy)propanol	Dermal				65 mg/kg bw/day
	Inhalation				310 mg/m3
Ethanol	Dermal				343 mg/kg bw/day
	Inhalation	1900 mg/m3			950 mg/m3
Oxydipropanol	Dermal				84 mg/kg bw/day
	Inhalation				238 mg/m3
2-(4-tert-butylbenzyl)propionaldehyde	Dermal	0,41 mg/kg bw	20 mg/kg bw		3,33 mg/kg bw/day
	Inhalation	0,29 mg/m3	0,29 mg/m3	0,048 mg/m3	0,048 mg/m3
(Z)-3-hexenyl salicylate	Dermal				0,9 mg/kg bw/day
	Inhalation				1,59 mg/m3
1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphtyl)ethan-1-one	Dermal	0,1011 mg/kg bw			1,73 mg/kg bw/day
	Inhalation				1,76 mg/m3
Benzyl acetate	Dermal		12,5 mg/kg bw		6,25 mg/kg bw/day
	Inhalation		43,8 mg/m3		21,9 mg/m3
Benzyl salicylate	Dermal				0,9 mg/kg bw/day
	Inhalation				3,17 mg/m3
Citronellol	Dermal				45,8 mg/kg bw/day
	Inhalation				161,6 mg/m3
Linalool	Dermal		5 mg/kg bw		2,5 mg/kg bw/day
	Inhalation		16,5 mg/m3		2,8 mg/m3

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
(2-Methoxymethylethoxy)propanol	Dermal				15 mg/kg bw/day
	Inhalation				37,2 mg/m3
	Oral				1,67 mg/kg bw/day
Ethanol	Dermal				206 mg/kg bw/day
	Inhalation	950 mg/m3			114 mg/m3
	Oral				87 mg/kg bw/day
Oxydipropanol	Dermal				51 mg/kg bw/day
	Inhalation				70 mg/m3
	Oral				24 mg/kg bw/day
2-(4-tert-butylbenzyl)propionaldehyde	Dermal	0,41 mg/kg bw	20 mg/kg bw		1,67 mg/kg bw/day
	Inhalation	0,07 mg/m3	0,07 mg/m3	0,012 mg/m3	0,012 mg/m3
	Oral		0,041 mg/kg bw		0,007 mg/kg bw/day
(Z)-3-hexenyl salicylate	Dermal				0,45 mg/kg bw/day
	Inhalation				0,39 mg/m3
	Oral				0,23 mg/kg bw/day
1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphtyl)ethan-1-one	Dermal	0,0506 mg/kg bw			0,86 mg/kg bw/day
	Inhalation				0,43 mg/m3



# SAFETY DATA SHEET

According to Regulation (EU) No 2015/830

Benzyl acetate	Oral Dermal Inhalation		6,25 mg/kg bw 11 mg/m <sup>3</sup>		0,25 mg/kg bw/day 3,125 mg/kg bw/day 5,5 mg/m <sup>3</sup>
Benzyl salicylate	Oral Dermal Inhalation		6,25 mg/kg bw		3,125 mg/kg bw/day 0,45 mg/kg bw/day 0,78 mg/m <sup>3</sup>
Citronellol	Oral Dermal Inhalation				0,45 mg/kg bw/day 27,5 mg/kg bw/day 47,8 mg/m <sup>3</sup>
Linalool	Oral Dermal Inhalation Oral		2,5 mg/kg bw 4,1 mg/m <sup>3</sup> 1,2 mg/kg bw	15 mg/kg bw/day	13,75 mg/kg bw/day 1,25 mg/kg bw/day 0,7 mg/m <sup>3</sup> 0,2 mg/kg bw/day

Predicted no-effect concentration (PNEC):

Chemical name	Route of exposure	Fresh water	Marine water	
(2-Methoxymethylethoxy)propanol	Water	19 mg/l	1,9 mg/l	
	Sediment	70,2 mg/kg	7,02 mg/kg	
	Intermittent water			190 mg/l
	STP			4168 mg/l
	Soil			2,74 mg/kg
Ethanol	Water	0,96 mg/l	0,79 mg/l	
	Sediment	3,6 mg/kg	2,9 mg/kg	
	Intermittent water			2,75 mg/l
	STP			580 mg/l
	Soil			0,63 mg/kg
Oxydipropanol	Oral			0,72 mg/kg food
	Water	0,1 mg/l	0,01 mg/l	
	Sediment	0,238 mg/kg	0,0238 mg/kg	
	Intermittent water			1 mg/l
	STP			1000 mg/l
2-(4-tert-butylbenzyl)propionaldehyde	Soil			0,0253 mg/kg
	Oral			313 mg/kg food
	Water	0,0020 mg/l	0,0002 mg/l	
	Sediment	0,0584 mg/kg	0,0058 mg/kg	
	Intermittent water			0,0204 mg/l
(Z)-3-hexenyl salicylate	STP			1,049 mg/l
	Soil			0,0463 mg/kg
	Water	0,00061 mg/l	0,000061 mg/l	
	Sediment	0,11 mg/kg	0,011 mg/kg	
	Intermittent water			0,0061 mg/l
Benzyl acetate	STP			10 mg/l
	Soil			0,0217 mg/kg
	Oral			40 mg/kg food
	Water	0,004 mg/l	0,0004 mg/l	
	Sediment	0,114 mg/kg	0,0114 mg/kg	
Benzyl salicylate	Intermittent water			0,04 mg/l
	STP			8,55 mg/l
	Soil			0,0205 mg/kg
	Water	0,00103 mg/l	0,00010 mg/l	
	Sediment	0,583 mg/kg	0,0583 mg/kg	
Citronellol	Intermittent water			0,01030 mg/l
	STP			10 mg/l
	Soil			0,116 mg/kg
	Oral			80 mg/kg food
	Water	0,0024 mg/l	0,00024 mg/l	



# SAFETY DATA SHEET

According to Regulation (EU) No 2015/830

Linalool	Sediment	0,0256 mg/kg	0,00256 mg/kg	
	Intermittent water			0,024 mg/l
	STP			580 mg/l
	Soil			0,00371 mg/kg
	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

## 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 : Use of specific protective industrial clothing is not required under normal conditions of use. In case of large scale exposure wear suitable protective clothing, overalls or suit, and similar boots. Suitable material: nitril. Indication of permeation breakthrough time: 6 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 : Under normal conditions of use specific gloves are not required. Wear appropriate gloves in case of frequent or prolonged use and in case of large scale exposure. Suitable material: nitril. ± 0,5 mm. Indication of permeation breakthrough time: 6 hours.
- 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

Appearance	: Liquid.	
Colour	: Colourless.	
Odour	: Perfumed.	
Odour threshold	: Not known.	
pH	: 2 - 11,5	
Solubility in water	: Dispersible.	
Partition coefficient (n-octanol/water)	: Not known.	Not measured. Not relevant for mixtures.
Flash point	: 37 °C	Closed Cup (ISO 2719, EN 11, DIN 51758, ASTM D 93)
Flammability (solid, gas)	: Not applicable.	Liquid. See flashpoint.
Auto ignition temperature	: > 207 °C	
Boiling point/boiling range	: 78 °C	
Melting point/melting range	: < -20 °C	
Explosive properties	: None known.	Does not contain explosives.
Explosion limits (% in air)	: Not known.	Lower explosion limit in air (%): 1,1 ( (2-Methoxymethylethoxy)propanol )
		Upper explosion limit in air (%): 19 Ethanol
Oxidising properties	: Not applicable.	Does not contain oxidizing substances.
Decomposition temperature	: Not known.	
Viscosity (20°C)	: 1 mm2/sec	(1 mm2/sec = 1cSt)
Viscosity (40°C)	: Not relevant.	The product contains < 10% substances having an aspiration hazard.
Vapour pressure (20°C)	: > 2300 Pa	



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 toxicological effects**

No toxicological research has been carried out on this product.

**Inhalation**

Acute toxicity : Calculated LC50: > 5,339 mg/l. Ingredients of unknown toxicity: < 1 %. ATE: > 5 mg/l. Low toxicity. Not classified - based on available data, the classification criteria are not met.  
Corrosion/irritation : Not classified - based on available data, the classification criteria are not met.  
Sensitisation : Does not contain substances classified as respiratory sensitiser. Not classified - based on available data, the classification criteria are not met.  
Carcinogenicity : 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 : Slight irritation possible. Not classified - based on available data, the classification criteria are not met.  
Sensitisation : 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**





# SAFETY DATA SHEET

According to Regulation (EU) No 2015/830

- 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. May cause hampered eyesight.
- 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 : 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 classified - based on available data, the classification criteria are not met.

Toxicological information:

Chemical name	Property		Method	Test animal
2-(4-tert-butylbenzyl)propionaldehyde	Mutagenicity	Negative	OECD 471	-----
	Skin sensitisation	2372 ug/cm2	OECD 429	Mouse
	LD50 (oral)	1390 mg/kg bw	-----	Rat
	LD50 (dermal)	> 5000 mg/kg bw	-----	Rabbit
	Skin irritation	Irritant	OECD 404	Rabbit
	Eye irritation	Non-irritant	-----	Rabbit
	NOAEL (oral)	25 mg/kg bw/d	-----	Rat
	Genotoxicity - in vivo	Negative	OECD 474	Mouse
	NOAEL (fertility, oral)	25 mg/kg bw/d	-----	Rat
	NOAEL (development, oral)	4 mg/kg bw/d	OECD 414	Rat
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
Alpha-methyl-1,3-benzodioxole-5-propionaldehyde	Skin irritation	Non-irritant	-----	
	LD50 (dermal)	> 2000 mg/kg bw	-----	Rabbit
	LD50 (oral)	3600 mg/kg bw	-----	Rat
	Skin irritation	Non-irritant	-----	
	NOAEL (development, oral)	> 500 mg/kg bw/d	-----	Rat
	NOAEL (dermal)	> 300 mg/kg bw/d	-----	Rat
Benzyl salicylate	Skin sensitisation	4100 ug/cm2	OECD 429	-----
	LD50 (oral)	2227 mg/kg bw	-----	Rat
	Skin sensitisation	725 ug/cm2	OECD 429	Mouse
	Skin irritation	Non-irritant	-----	Rabbit
	NOAEL (oral) - estimate	> 360 mg/kg bw/d	Read across	Rat
	Mutagenicity	Negative	OECD 471	Salmonella typhimurium
	NOAEL (fertility) - estimate	180 mg/kg.d	Read across	Rat
	NOAEL (development) - estimate	> 360 mg/kg.d	Read across	Rat



Citronellol	Eye irritation	Moderately irritant	----	Rabbit
	Genotoxicity - in vitro	Not genotoxic		
	Skin sensitisation	10875 ug/cm2	OECD 429	Mouse
	Mutagenicity	Not mutagenic	OECD 471	Salmonella typhimurium
	NOAEL (oral)	> 50 mg/kg bw/d		Rat
	Skin irritation	Moderately irritant		Rabbit
	LD50 (oral)	3450 mg/kg bw	----	Rat
	LD50 (dermal)	2650 mg/kg bw		Rabbit
	NOAEL (fertility, dermal)	300 mg/kg bw/d	OECD 421	Rat
	NOAEL (developmental toxicity, dermal)	> 300 mg/kg bw/d	OECD 421	Rat
Linalool	Skin irritation	Moderately irritant	Patch test	Human
	Eye irritation	Moderately irritant		Rabbit
	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

## SECTION 12 ECOLOGICAL INFORMATION

### 12.1. Toxicity

No ecotoxicological research has been carried out on this product.

Ecotoxicity : Harmful to aquatic organisms. Calculated LC50 (fish): 63 mg/l. Calculated EC50 (waterflea): 78 mg/l. Contains 0 % of components with unknown hazards to the aquatic environment.

### 12.2. Persistence and degradability

Persistence – degradability : May cause long-term adverse effects in the aquatic environment.

### 12.3. Bioaccumulative potential

Bioaccumulative potential : Contains bioaccumulating substances.

### 12.4. Mobility in soil

Mobility : Spilled product can penetrate into the ground and get into the surface water and ground water.

### 12.5. Results of PBT and vPvB ass

PBT/vPvB assessment : Does not contain PBT or vPvB substances in concentrations higher than 0,1%.

### 12.6. Other adverse effects

Other information : Not applicable.

Ecological information:

Chemical name	Property		Method	Test animal
---------------	----------	--	--------	-------------



# SAFETY DATA SHEET

According to Regulation (EU) No 2015/830

(Z)-3-hexenyl salicylate	Ultimate aerobic biodegradation (%)	89 %	OECD 301 F	
	LC50 (fish) - estimate	1,13 mg/l		Brachydanio rerio
	EC50 (waterflea)	3,7 mg/l	OECD 202	Daphnia magna
	IC50 (alga)	0,61 mg/l	OECD 201	Desmodesmus subspicatus
	Log P(ow)	4,57		
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		

## 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 and non-empty pack as hazardous waste.
- Additional warning : Residues may cause an explosion hazard. Do not puncture, cut or weld uncleaned drums.
- Waste water discharge : Do not dispose into the environment, in drains or in water courses.
- European waste catalogue : Dispose hazardous waste in accordance with Directive 91/689/EEC under acknowledgement of a waste code according to Commission Decision 2000/532/EC to an official chemical waste depot.
- Local legislation : Disposal should be in accordance with applicable regional, national, and local laws and regulations. Local regulations may be more stringent than regional or national requirements and must be complied with.

## SECTION 14 TRANSPORT INFORMATION

### 14.1. UN number

UN nr. : UN 1170

### 14.2. UN proper shipping name

Transport name : ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)  
Transport name (IMDG, IATA) : ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)

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

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

Class : 3  
Classification code : F1  
Packaging group : III  
Danger label : 3  
Tunnel restriction code : D/E



Other information : Not intended for carriage by tank-vessels on inland waterways.



IMDG (sea)  
Class : 3  
Packaging group : III  
EmS (fire / spill) : F - E / S - D  
Marine pollutant : No

IATA (air)  
Class : 3

#### 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. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Marpol : Not intended to be carried in bulk according to International Maritime Organisation (IMO) instruments. Packaged liquids are not considered bulk.

### SECTION 15 REGULATORY INFORMATION

#### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Community regulations : Regulation (EU) No 2015/830 (REACH), Regulation (EC) No 1272/2008 (CLP) and other regulations.

#### 15.2. Chemical safety assessment

Chemical safety assessment : Not applicable.

### SECTION 16 OTHER INFORMATION

#### 16.1. Other information

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

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

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

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

ADR : European Agreement concerning the International Carriage of Dangerous Goods by Road  
ATE : Acute Toxicity Estimate  
CLP : Classification, Labeling & Packaging  
CMR : Carcinogenic, Mutagenic or toxic for Reproduction  
EEC : European Economic Community  
GHS : Globally Harmonized System of Classification and Labelling of Chemicals  
IATA : International Air Transport Association  
IBC code : International Bulk Chemical Code  
IMDG : International Maritime Dangerous Goods Code  
LD50/LC50 : Lethal Dose/Concentration for 50% of a population  
MAC : Maximum Allowable Concentration  
MARPOL : International Convention for the Prevention of Pollution From Ships



NO(A)EL	: No Observed (Adverse) Effect Level
OECD	: Organisation for Economic Co-operation and Development
PBT	: Persistent, Bioaccumulative and Toxic
PC	: Chemical product category
PT	: Product type
REACH	: Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	: Regulations concerning the International Carriage of Dangerous Goods by Rail
STP	: Sewage Treatment Plant
SU	: Sector of Use
TWA/STEL	: Time-Weighted Average/Short Term Exposure Limit
UN	: United Nations
VOC	: Volatile Organic Compounds
vPvB	: Very Persistent and Very Bioaccumulative

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

Flam. Liq. 3	: On basis of test data.
Aquatic Chronic 3	: Calculation method.

Full text of hazard classes mentioned in section 3:

Flam. Liq. 2	: Flammable liquid, category 2.
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.
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:

H225	Highly flammable liquid and vapour.
H302	Harmful if swallowed.
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.

Number format : ", " used as decimal separator.

End of safety data sheet.