

# SAFETY DATA SHEET

AIR WICK Electrical Plug Diffuser Crisp Linen & Lilac



## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifier

**Product name** : AIR WICK Electrical Plug Diffuser Crisp Linen & Lilac  
**SDS no.** : D8387801  
**Formulation #** : 3181185 / 3204566, 3220252  
**Product type** : Liquid.

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

#### Identified uses

Air care, continuous action (solid and liquid)  
Consumer use

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

#### Supplier

##### The United Kingdom:

RB UK Hygiene Home Commercial Ltd  
Wellcroft House  
Wellcroft Road  
Slough, Berkshire  
SL1 4AQ  
Tel: 0800 376 8181  
Email: ConsumerCare\_UK@reckitt.com

##### The Republic Of Ireland:

RB Ireland Hygiene Home Commercial Ltd  
7 Riverwalk  
Citywest Business Campus  
Dublin 24  
Ireland  
Tel: 01 661 7318  
Email: ConsumerHealth\_IE@reckitt.com

### 1.4 Emergency telephone number

#### National advisory body/Poison Centre

**Telephone number** : **GB** - NHS 111/NHS 24 Tel: 111  
**NI** - www.gpoutofhours.hscni.net/  
**IE** - Poisons Information Centre of Ireland: 01 809 2166 8am-10pm 7 days a week

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

**Product definition** : Mixture

**Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]**

Eye Irrit. 2, H319

Skin Sens. 1, H317

Aquatic Chronic 3, H412

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

### 2.2 Label elements

**Hazard pictograms** :



**Signal word** : Warning

**Hazard statements** : May cause an allergic skin reaction.  
Causes serious eye irritation.  
Harmful to aquatic life with long lasting effects.

**Precautionary statements**

**General** : Keep out of reach of children. If medical advice is needed, have product container or label at hand.

**Prevention** : Not applicable

**Response** : IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

**Storage** : Not applicable.

**Disposal** : Not applicable

**Hazardous ingredients** : LINALOOL  
CITRONELLOL  
Rose ketone-4

**Supplemental label elements** : Contains Limonene, Alpha-isomethyl ionone, Ethyl 2,6,6-trimethylcyclohexa-1,3-enecarboxylate, Lauraldehyde, Nerol, Pentamethylheptenone, Eugenol, Eucalyptol, Cinnamyl alcohol, Citral, Linalyl acetate. May produce an allergic reaction.

**Special packaging requirements**

**Containers to be fitted with child-resistant fastenings** : Not applicable.

**Tactile warning of danger** : Not applicable.

### 2.3 Other hazards

**Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII** : This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

**Other hazards which do not result in classification** : None known.

**SECTION 3: Composition/information on ingredients****3.2 Mixtures**

: Mixture

Product/ingredient name	Identifiers	%	Classification	Specific Conc. Limits, M-factors and ATEs	Type
2,2-dimethyl-1,3-dioxolan-4-ylmethanol	REACH #: 01-2120066005-66 EC: 202-888-7 CAS: 100-79-8	≥50 - ≤75	Eye Irrit. 2, H319	-	[1]
3,5,5-trimethylhexyl acetate	REACH #: 01-2119972325-34 EC: 261-245-9 CAS: 58430-94-7	≤3	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Chronic 2, H411	-	[1]
cis-2-tert-Butylcyclohexyl acetate	REACH #: 01-2119970713-33 EC: 243-718-1 CAS: 20298-69-5	≤3	Aquatic Chronic 2, H411	-	[1]
(2E)-2-ethyl-4-(2,2,3-trimethylcyclopent-3-en-1-yl)but-2-en-1-ol	REACH #: 01-2119529224-45 EC: 701-122-3 CAS: 106185-75-5	≤3	Eye Irrit. 2, H319 Aquatic Chronic 2, H411	-	[1]
LINALOOL	REACH #: 01-2119474016-42 EC: 201-134-4 CAS: 78-70-6 Index: 603-235-00-2	≤3	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1B, H317	-	[1]
2-T-BUTYLCYCLOHEXYL ACETATE	EC: 201-828-7 CAS: 88-41-5	≤3	Aquatic Chronic 2, H411	-	[1]
2,6-DIMETHYL-7-OCTEN-2-OL	REACH #: 01-2119457274-37 EC: 242-362-4 CAS: 18479-58-8	≤3	Skin Irrit. 2, H315 Eye Irrit. 2, H319	-	[1]
Distillates (petroleum), hydro- treated light	REACH #: 01-2119484819-18 EC: 265-149-8 CAS: 64742-47-8 Index: 649-422-00-2	≤3	Flam. Liq. 3, H226 Skin Irrit. 2, H315 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411	-	[1]
2-Ethyl-4-(2,2,3-trimethyl-3-cyclopenten-1-yl)-2-buten-1-ol	EC: 248-908-8 CAS: 28219-61-6	≤3	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Chronic 2, H411	-	[1]
p-Methoxybenzaldehyde	REACH #: 01-2119977101-43 EC: 204-602-6 CAS: 123-11-5	≤3	Aquatic Chronic 3, H412	-	[1]
Methyl ionone (mixture of isomers)	REACH #: 01-2119471851-35 EC: 215-635-0 CAS: 1335-46-2	≤3	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Chronic 2, H411	-	[1]
CITRONELLOL	REACH #: 01-2119453995-23 EC: 203-375-0	≤3	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1B, H317	-	[1]

**SECTION 3: Composition/information on ingredients**

PHENETHYL ALCOHOL	CAS: 106-22-9 REACH #: 01-2119963921-31 EC: 200-456-2 CAS: 60-12-8	≤3	Acute Tox. 4, H302 Eye Irrit. 2, H319	ATE [Oral] = 1603 mg/kg	[1]
BENZYL ACETATE	REACH #: 01-2119638272-42 EC: 205-399-7 CAS: 140-11-4	≤3	Aquatic Chronic 3, H412	-	[1] [2]
LIMONENE	REACH #: 01-2120766421-57 EC: 205-341-0 CAS: 138-86-3 Index: 601-029-00-7	<1	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	M [Acute] = 1 M [Chronic] = 1	[1]
D_LIMONENE	REACH #: 01-2119529223-47 EC: 227-813-5 CAS: 5989-27-5 Index: 601-096-00-2	<1	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1B, H317 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	M [Acute] = 1 M [Chronic] = 1	[1]
ALPHA-ISOMETHYL IONONE	REACH #: 01-2120138569-45 EC: 204-846-3 CAS: 127-51-5	<1	Skin Sens. 1B, H317 Aquatic Chronic 2, H411	-	[1]
LAURALDEHYDE	REACH #: 01-2119969441-33 EC: 203-983-6 CAS: 112-54-9	<1	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1B, H317	-	[1]
Tetrahydro-4-methyl-2- (2-methylpropen-1-yl)pyran	REACH #: 01-2119976300-42 EC: 240-457-5 CAS: 16409-43-1	<1	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Repr. 2, H361	-	[1]
4-METHYL-3-DECEN-5-OL	REACH #: 01-2119983528-21 EC: 279-815-0 CAS: 81782-77-6	≤1	Aquatic Acute 1, H400 Aquatic Chronic 2, H411	M [Acute] = 1	[1]
NEROL	REACH #: 01-2119983244-33 EC: 203-378-7 CAS: 106-25-2	≤0.3	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1B, H317	-	[1]
CITRAL	REACH #: 01-2119462829-23 EC: 226-394-6 CAS: 5392-40-5 Index: 605-019-00-3	≤0.3	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317	-	[1] [2]
CINNAMYL ALCOHOL	REACH #: 01-2119934496-29 EC: 203-212-3 CAS: 104-54-1	≤0.3	Acute Tox. 4, H302 Eye Irrit. 2, H319 Skin Sens. 1B, H317	ATE [Oral] = 2000 mg/kg	[1]
LINALYL ACETATE	REACH #:	≤0.3	Skin Irrit. 2, H315	-	[1]

### SECTION 3: Composition/information on ingredients

	01-2119454789-19 EC: 204-116-4 CAS: 115-95-7		Eye Irrit. 2, H319 Skin Sens. 1B, H317		
DIMETHYLTETRAHYDRO BENZALDEHYDE	EC: 272-113-5 CAS: 68737-61-1	≤0.3	Skin Irrit. 2, H315 Skin Sens. 1B, H317 Aquatic Chronic 2, H411	-	[1]
ROSE KETONE-4	EC: 245-833-2 CAS: 23696-85-7	≤0.3	Skin Irrit. 2, H315 Skin Sens. 1A, H317 Aquatic Chronic 2, H411	-	[1]
EUGENOL	REACH #: 01-2119971802-33 EC: 202-589-1 CAS: 97-53-0	≤0.3	Eye Irrit. 2, H319 Skin Sens. 1B, H317	-	[1]
Eucalyptol	REACH #: 01-2119967772-24 EC: 207-431-5 CAS: 470-82-6	≤0.3	Flam. Liq. 3, H226 Skin Sens. 1B, H317  <b>See Section 16 for the full text of the H statements declared above.</b>	-	[1]

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

#### Type

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

Occupational exposure limits, if available, are listed in Section 8.

### SECTION 4: First aid measures

#### 4.1 Description of first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such

## SECTION 4: First aid measures

- as a collar, tie, belt or waistband.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

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

#### Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:  
pain or irritation  
watering  
redness
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:  
irritation  
redness
- Ingestion** : No specific data.

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

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None known.

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

- Hazards from the substance or mixture** : This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
- Hazardous combustion products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide

### 5.3 Advice for firefighters

- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

## SECTION 6: Accidental release measures

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

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

### 6.2 Environmental precautions

- : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

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

- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product.

### 6.4 Reference to other sections

- : See Section 1 for emergency contact information.  
See Section 8 for information on appropriate personal protective equipment.  
See Section 13 for additional waste treatment information.

## SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

### 7.1 Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapour or mist. Avoid release to the environment. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

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

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

### 7.3 Specific end use(s)



<b>Recommendations</b>	: Air care, continuous action (solid and liquid) Consumer use
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**Industrial sector specific solutions** : Not available.

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker exposure or environmental releases.

## Occupational exposure limits

Product/ingredient name	Exposure limit values
BENZYL ACETATE	<b>NAOSH (Ireland, 5/2021). Notes: Advisory Occupational Exposure Limit Values (OELVs)</b> OELV-8hr: 10 ppm 8 hours.
CITRAL	<b>NAOSH (Ireland, 5/2021). Notes: Advisory Occupational Exposure Limit Values (OELVs)</b> OELV-8hr: 5 ppm 8 hours. Form: The Inhalable Fraction and Vapour note is used when a material exerts sufficient vapour pressure such that it may be present in both particle and vapour phases.

<p><b>Recommended monitoring procedures</b></p>	<p>: Reference should be made to monitoring standards, such as the following:          European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.</p>
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## DNELs/DMELs

Product/ingredient name	Type	Exposure	Value	Population	Effects
3,5,5-trimethylhexyl acetate	DNEL	Long term Oral	0.4 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	0.4 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	0.8 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	1.4 mg/m³	General population	Systemic
	DNEL	Long term Inhalation	5.64 mg/m³	Workers	Systemic
	DNEL	Long term Oral	3 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	3 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	5.2 mg/m³	General population	Systemic
	DNEL	Long term Dermal	6 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	21 mg/m³	Workers	Systemic
(2E)-2-ethyl-4-(2,2,3-trimethylcyclopent-3-en-1-yl) but-2-en-1-ol	DNEL	Long term Dermal	15 mg/cm²	Workers	Local
	DNEL	Short term Dermal	15 mg/cm²	Workers	Local
	DNEL	Long term Dermal	15 mg/cm²	General population	Local



## SECTION 8: Exposure controls/personal protection

2,6-DIMETHYL-7-OCTEN-2-OL	DNEL	Short term Oral	1.2 mg/kg bw/day	[Consumers] Workers	Systemic
	DNEL	Long term Dermal	1.25 mg/kg bw/day	General population	Systemic
	DNEL	Short term Dermal	1.5 mg/cm <sup>2</sup>	General population	Local
	DNEL	Long term Dermal	1.5 mg/cm <sup>2</sup>	General population	Local
	DNEL	Long term Oral	2.49 mg/kg bw/day	General population	Systemic
	DNEL	Short term Dermal	3 mg/cm <sup>2</sup>	Workers	Local
	DNEL	Long term Dermal	3 mg/cm <sup>2</sup>	Workers	Local
	DNEL	Long term Dermal	3.5 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	4.33 mg/m <sup>3</sup>	General population	Systemic
	DNEL	Long term Inhalation	24.58 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Inhalation	73.5 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Dermal	20.8 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	21.7 mg/m <sup>3</sup>	General population	Systemic
	DNEL	Long term Dermal	12.5 mg/kg bw/day	[Consumers] General population	Systemic
	DNEL	Long term Oral	2.5 mg/kg bw/day	[Consumers] General population	Systemic
	DNEL	Long term Dermal	2.5 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	4.35 mg/m <sup>3</sup>	General population	Systemic
	DNEL	Long term Dermal	7 mg/kg bw/day	Workers	Systemic
2-Ethyl-4-(2,2,3-trimethyl-3-cyclopenten-1-yl)-2-buten-1-ol	DNEL	Long term Inhalation	24.7 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Inhalation	21 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Dermal	6 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	5.2 mg/m <sup>3</sup>	General population	Systemic
p-Methoxybenzaldehyde	DNEL	Long term Dermal	3 mg/kg bw/day	[Consumers] General population	Systemic
	DNEL	Long term Oral	3 mg/kg bw/day	[Consumers] General population	Systemic
	DNEL	Long term Oral	1 mg/kg bw/day	[Consumers] General population	Systemic
	DNEL	Long term Inhalation	1.74 mg/m <sup>3</sup>	General population	Systemic
Methyl ionone (mixture of isomers)	DNEL	Long term Dermal	2 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	3.33 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	5.88 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Inhalation	12.24 mg/	Workers	Systemic

CITRONELLOL	DNEL	Inhalation Long term Dermal	m <sup>3</sup> 6.94 mg/ kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	3.62 mg/m <sup>3</sup>	General population [Consumers]	Systemic
	DNEL	Long term Dermal	4.17 mg/ kg bw/day	General population [Consumers]	Systemic
	DNEL	Long term Oral	2.08 mg/ kg bw/day	General population [Consumers]	Systemic
	DNEL	Long term Oral	3.7 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	6.4 mg/m <sup>3</sup>	General population	Systemic
	DNEL	Long term Dermal	7.4 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	14.8 mg/ kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	26.1 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Inhalation	161.6 mg/ m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Dermal	327.4 mg/ kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	47.8 mg/m <sup>3</sup>	General population [Consumers]	Systemic
	DNEL	Long term Dermal	196.4 mg/ kg bw/day	General population [Consumers]	Systemic
	DNEL	Long term Oral	13.8 mg/ kg bw/day	General population [Consumers]	Systemic
	DNEL	Short term Dermal	2.95 mg/ cm <sup>2</sup>	General population	Local
	DNEL	Short term Dermal	2.95 mg/ cm <sup>2</sup>	Workers	Local
	DNEL	Short term Inhalation	10 mg/m <sup>3</sup>	General population	Local
	DNEL	Long term Inhalation	10 mg/m <sup>3</sup>	General population	Local
	DNEL	Short term Inhalation	10 mg/m <sup>3</sup>	Workers	Local
	DNEL	Long term Inhalation	10 mg/m <sup>3</sup>	Workers	Local
	DNEL	Long term Oral	13.8 mg/ kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	47.8 mg/m <sup>3</sup>	General population	Systemic
	DNEL	Long term Inhalation	161.6 mg/ m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Dermal	196.4 mg/ kg bw/day	General population	Systemic
	DNEL	Long term Dermal	327.4 mg/ kg bw/day	Workers	Systemic
PHENETHYL ALCOHOL	DNEL	Long term Inhalation	59.9 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Dermal	21.2 mg/ kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	17.7 mg/m <sup>3</sup>	General population	Systemic

## SECTION 8: Exposure controls/personal protection

BENZYL ACETATE	DNEL	Long term Dermal	12.7 mg/kg bw/day	[Consumers] General population	Systemic
	DNEL	Long term Oral	5.1 mg/kg bw/day	[Consumers] General population	Systemic
	DNEL	Short term Oral	5.1 mg/kg bw/day	[Consumers] General population	Systemic
	DNEL	Long term Oral	5.1 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	12.7 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	17.7 mg/m <sup>3</sup>	General population	Systemic
	DNEL	Long term Dermal	21.2 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	59.9 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Oral	1.3 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	1.3 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	2.2 mg/m <sup>3</sup>	General population	Systemic
	DNEL	Long term Dermal	2.5 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	9 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Inhalation	66.7 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Dermal	9.5 mg/kg bw/day	Workers	Systemic
D_LIMONENE	DNEL	Long term Inhalation	16.6 mg/m <sup>3</sup>	General population	Systemic
	DNEL	Long term Dermal	4.8 mg/kg bw/day	[Consumers] General population	Systemic
	DNEL	Long term Oral	4.8 mg/kg bw/day	[Consumers] General population	Systemic
	DNEL	Long term Oral	4.8 mg/kg bw/day	[Consumers] General population	Systemic
	DNEL	Long term Dermal	4.8 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	9.5 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	16.6 mg/m <sup>3</sup>	General population	Systemic
	DNEL	Long term Inhalation	66.7 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Oral	35.5 µg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	44.6 µg/kg bw/day	General population	Systemic
ALPHA-ISOMETHYL IONONE	DNEL	Long term Dermal	0.375 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	1.45 mg/m <sup>3</sup>	General population	Systemic
	DNEL	Long term Inhalation	8.22 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Dermal	0.00028	General	Local
LAURALDEHYDE	DNEL	Long term Dermal	0.00028	General	Local

## SECTION 8: Exposure controls/personal protection

Tetrahydro-4-methyl-2-(2-methylpropen-1-yl)pyran	DNEL	Long term Dermal	mg/cm <sup>2</sup> 0.00057	population Workers	Local
	DNEL	Long term Oral	mg/cm <sup>2</sup> 7 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	7 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	12.3 mg/m <sup>3</sup>	General population	Systemic
	DNEL	Long term Dermal	14.1 mg/ kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	49.7 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Oral	0.2 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	0.2 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	0.3 mg/m <sup>3</sup>	General population	Systemic
	DNEL	Long term Dermal	0.3 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	1.2 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Dermal	89.3 µg/kg bw/day	General population	Systemic
	DNEL	Short term Oral	5 mg/kg bw/day	General population	Systemic
	DNEL	Short term Dermal	5 mg/kg bw/day	General population	Systemic
	DNEL	Short term Inhalation	8.7 mg/m <sup>3</sup>	General population	Systemic
	DNEL	Long term Oral	10 mg/kg bw/day	General population	Systemic
	DNEL	Short term Dermal	10 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Dermal	10 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Dermal	12.5 mg/ cm <sup>2</sup>	General population	Local
	DNEL	Long term Dermal	12.5 mg/ cm <sup>2</sup>	General population	Local
4-METHYL-3-DECEN-5-OL	DNEL	Long term Inhalation	14.38 mg/ m <sup>3</sup>	General population	Systemic
	DNEL	Short term Inhalation	21.74 mg/ m <sup>3</sup>	General population	Local
	DNEL	Long term Inhalation	21.74 mg/ m <sup>3</sup>	General population	Local
	DNEL	Short term Dermal	25 mg/cm <sup>2</sup>	Workers	Local
	DNEL	Long term Dermal	25 mg/cm <sup>2</sup>	Workers	Local
	DNEL	Short term Inhalation	35.26 mg/ m <sup>3</sup>	Workers	Systemic
	DNEL	Short term Inhalation	88.16 mg/ m <sup>3</sup>	Workers	Local
	DNEL	Long term Inhalation	88.16 mg/ m <sup>3</sup>	Workers	Local
	DNEL	Long term Inhalation	98.7 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Oral	0.62 mg/ kg bw/day	General population	Systemic
	DNEL	Long term Dermal	0.62 mg/ kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	1.09 mg/m <sup>3</sup>	General population	Systemic
NEROL					

**SECTION 8: Exposure controls/personal protection**

CITRAL	DNEL	Long term Dermal	1.25 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	4.4 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Dermal	0.14 mg/cm <sup>2</sup>	General population	Local
	DNEL	Long term Dermal	0.14 mg/cm <sup>2</sup>	Workers	Local
	DNEL	Long term Oral	0.6 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	1 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	1.7 mg/kg bw/day	Workers	Systemic
CINNAMYL ALCOHOL	DNEL	Long term Inhalation	2.7 mg/m <sup>3</sup>	General population	Systemic
	DNEL	Long term Inhalation	9 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Oral	0.268 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	0.268 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	0.465 mg/m <sup>3</sup>	General population	Systemic
	DNEL	Long term Dermal	0.749 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	2.64 mg/m <sup>3</sup>	Workers	Systemic
LINALYL ACETATE	DNEL	Long term Oral	0.2 mg/kg bw/day	General population	Systemic
	DNEL	Short term Dermal	0.2362 mg/cm <sup>2</sup>	General population	Local
	DNEL	Long term Dermal	0.2362 mg/cm <sup>2</sup>	General population	Local
	DNEL	Short term Dermal	0.2362 mg/cm <sup>2</sup>	Workers	Local
	DNEL	Long term Dermal	0.2362 mg/cm <sup>2</sup>	Workers	Local
	DNEL	Long term Inhalation	0.68 mg/m <sup>3</sup>	General population	Systemic
	DNEL	Long term Dermal	1.25 mg/kg bw/day	General population	Systemic
EUGENOL	DNEL	Long term Dermal	2.5 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	2.75 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Inhalation	21.2 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Dermal	6 ng/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	5.22 mg/m <sup>3</sup>	General population [Consumers]	Systemic
	DNEL	Long term Dermal	3 mg/kg bw/day	General population [Consumers]	Systemic
	DNEL	Long term Oral	3 mg/kg bw/day	General population [Consumers]	Systemic
	DNEL	Long term Oral	3 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	3 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	3 mg/kg bw/day	General population	Systemic

**SECTION 8: Exposure controls/personal protection**

Eucalyptol	DNEL	Long term Inhalation	5.22 mg/m <sup>3</sup>	General population	Systemic
	DNEL	Long term Dermal	6 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	21.2 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Dermal	1 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	1.74 mg/m <sup>3</sup>	General population	Systemic
	DNEL	Long term Dermal	2 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	7.05 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Oral	600 mg/kg bw/day	General population	Systemic

**PNECs**

Product/ingredient name	Compartment Detail	Value	Method Detail
LINALOOL	Fresh water	0.2 mg/l	Assessment Factors
	Marine water	0.02 mg/l	Assessment Factors
	Sewage Treatment Plant	10 mg/l	Assessment Factors
2,6-DIMETHYL-7-OCTEN-2-OL	Fresh water	27.8 µg/l	Assessment Factors
	Marine water	2.78 µg/l	Assessment Factors
	Fresh water sediment	0.594 mg/kg dw	Equilibrium Partitioning
	Marine water sediment	0.059 mg/kg dw	Equilibrium Partitioning
	Soil	0.103 mg/kg dw	Equilibrium Partitioning
	Secondary Poisoning	111 mg/kg	Assessment Factors
CITRONELLOL	Fresh water	0.002 mg/l	Assessment Factors
	Marine water	0 mg/l	Assessment Factors
	Soil	0.004 mg/kg dw	Equilibrium Partitioning
	Secondary Poisoning	111 mg/kg	Assessment Factors
PHENETHYL ALCOHOL	Fresh water	0.215 mg/l	Assessment Factors
	Marine water	0.021 mg/l	Assessment Factors
	Sewage Treatment Plant	10 mg/l	Assessment Factors
	Fresh water sediment	1.454 mg/kg	Equilibrium Partitioning
	Marine water sediment	0.145 mg/kg	Equilibrium Partitioning
D_LIMONENE	Soil	0.164 mg/kg	Equilibrium Partitioning
	Fresh water	14 µg/l	Assessment Factors
	Marine water	1.4 µg/l	Assessment Factors
	Sewage Treatment Plant	1.8 mg/l	Assessment Factors
	Fresh water sediment	3.85 mg/kg dw	Equilibrium Partitioning
	Marine water sediment	0.385 mg/kg dw	Equilibrium Partitioning
	Soil	0.763 mg/kg	Equilibrium Partitioning
	Secondary Poisoning	111 mg/kg	Assessment Factors

**8.2 Exposure controls****Appropriate engineering controls**

: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

**Individual protection measures****Hygiene measures**

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

## SECTION 8: Exposure controls/personal protection

- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.
- Skin protection**
- Hand protection** : EN 16523-1:2015  
Tested for protection against chemical permeation.  
Low chemical resistant or waterproof gloves.  
(EN 16523-1:2015 supersedes EN 374-3:2003)  
EN 374-2:2003  
Tested for protection against liquid penetration and micro-organisms.  
EN 388:2003  
Tested for protection against mechanical risks (abrasion, blade cut resistance, tear resistance and puncture resistance).  
ISO 374-1:2016/Type A  
Protective glove with permeation resistance of at least 30 minutes each for at least 6 test chemicals.  
ISO 374-1:2016/Type B  
Protective glove with permeation resistance of at least 30 minutes each for at least 3 test chemicals.  
ISO 374-1:2016/Type C  
Protective glove with permeation resistance of at least 10 minutes for at least 1 test chemical. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

## SECTION 9: Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

### 9.1 Information on basic physical and chemical properties

#### Appearance

- Physical state** : Liquid. [free from contaminants]
- Colour** : Colourless to light yellow.
- Odour** : Not available.
- Melting point/freezing point** : Not relevant/applicable due to nature of the product.
- Initial boiling point and boiling range** : Not relevant/applicable due to nature of the product.
- Flammability (solid, gas)** : Not relevant/applicable due to nature of the product.
- Upper/lower flammability or explosive limits** : Not relevant/applicable due to nature of the product.



## SECTION 9: Physical and chemical properties

<b>Flash point</b>	: Closed cup: 91°C (195.8°F)
<b>Auto-ignition temperature</b>	: Not relevant/applicable due to nature of the product.
<b>Decomposition temperature</b>	: Not relevant/applicable due to nature of the product.
<b>pH</b>	: Not applicable. Product is non-soluble (in water).
<b>Viscosity</b>	: Not relevant/applicable due to nature of the product.
<b>Solubility in water</b>	: Not relevant/applicable due to nature of the product.
<b>Partition coefficient: n-octanol/ water</b>	: Not relevant/applicable due to nature of the product.
<b>Vapour pressure</b>	: Not relevant/applicable due to nature of the product.
<b>Vapour density</b>	: Not relevant/applicable due to nature of the product.
<b>Particle characteristics</b>	
<b>Median particle size</b>	: Not relevant/applicable due to nature of the product.

## SECTION 10: Stability and reactivity

<b>10.1 Reactivity</b>	: No specific test data related to reactivity available for this product or its ingredients.
<b>10.2 Chemical stability</b>	: The product is stable.
<b>10.3 Possibility of hazardous reactions</b>	: Under normal conditions of storage and use, hazardous reactions will not occur.
<b>10.4 Conditions to avoid</b>	: No specific data.
<b>10.5 Incompatible materials</b>	: No specific data.
<b>10.6 Hazardous decomposition products</b>	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

### 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
2,2-dimethyl-1,3-dioxolan-4-ylmethanol	LD50 Oral	Rat	7 g/kg	-
3,5,5-trimethylhexyl acetate	LD50 Dermal	Rabbit	>5 g/kg	-
	LD50 Oral	Rat	4250 mg/kg	-
LINALOOL	LD50 Dermal	Rabbit	5610 mg/kg	-
	LD50 Dermal	Rat	5610 mg/kg	-
	LD50 Oral	Rat	2790 mg/kg	-
2-T-BUTYLCYCLOHEXYL ACETATE	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	4600 mg/kg	-
2,6-DIMETHYL-7-OCTEN-2-OL	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	3600 mg/kg	-
p-Methoxybenzaldehyde	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	1510 mg/kg	-
Methyl ionone (mixture of isomers)	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-
CITRONELLOL	LD50 Dermal	Rabbit	2650 mg/kg	-

**SECTION 11: Toxicological information**

PHENETHYL ALCOHOL	LD50 Oral	Rat	3450 mg/kg	-
	LD50 Dermal	Rabbit	805 mg/kg	-
	LD50 Dermal	Rabbit - Male, Female	2535 mg/kg	-
BENZYL ACETATE	LD50 Oral	Rat - Male, Female	1603 mg/kg	-
	LD50 Dermal	Rabbit	>5 g/kg	-
	LD50 Oral	Rat	2490 mg/kg	-
LIMONENE	LD50 Oral	Rat	5300 mg/kg	-
D_LIMONENE	LD50 Dermal	Rabbit	>5000 mg/kg	-
ALPHA-ISOMETHYL IONONE	LD50 Oral	Rat	4400 mg/kg	-
	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-
LAURALDEHYDE	LD50 Oral	Rat	23 g/kg	-
	LD50 Oral	Rat	4300 mg/kg	-
	LD50 Oral	Rat	4300 mg/kg	-
Tetrahydro-4-methyl-2-(2-methylpropen-1-yl)pyran	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	4500 mg/kg	-
	LD50 Dermal	Rabbit	2250 mg/kg	-
CITRAL	LD50 Oral	Rat	3.45 g/kg	-
	LD50 Dermal	Rabbit	>5 g/kg	-
	LD50 Oral	Rat	2 g/kg	-
CINNAMYL ALCOHOL	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	13934 mg/kg	-
	LD50 Dermal	Rat	1930 mg/kg	-
LINALYL ACETATE	LD50 Oral	Rat	2480 mg/kg	-
EUGENOL	LD50 Oral	Rat		
Eucalyptol	LD50 Oral	Rat		

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

**Acute toxicity estimates**

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)
FIL,AWICK,FIR SUNNY LE EU	148151.6	N/A	N/A	N/A	N/A
PHX_3181185_D8387801 EU					
2,2-dimethyl-1,3-dioxolan-4-ylmethanol	7000	N/A	N/A	N/A	N/A
3,5,5-trimethylhexyl acetate	4250	N/A	N/A	N/A	N/A
cis-2-tert-Butylcyclohexyl acetate	2500	N/A	N/A	N/A	N/A
LINALOOL	2790	5610	N/A	N/A	N/A
2-T-BUTYLCYCLOHEXYL ACETATE	4600	N/A	N/A	N/A	N/A
2,6-DIMETHYL-7-OCTEN-2-OL	3600	N/A	N/A	N/A	N/A
p-Methoxybenzaldehyde	2500	N/A	N/A	N/A	N/A
CITRONELLOL	3450	2650	N/A	N/A	N/A
PHENETHYL ALCOHOL	1603	2500	N/A	N/A	N/A
BENZYL ACETATE	2490	N/A	N/A	N/A	N/A
LIMONENE	5300	N/A	N/A	N/A	N/A
D_LIMONENE	4400	N/A	N/A	N/A	N/A
LAURALDEHYDE	23000	N/A	N/A	N/A	N/A
Tetrahydro-4-methyl-2-(2-methylpropen-1-yl)pyran	4300	N/A	N/A	N/A	N/A
NEROL	4500	N/A	N/A	N/A	N/A
CITRAL	3450	2250	N/A	N/A	N/A
CINNAMYL ALCOHOL	2000	N/A	N/A	N/A	N/A
LINALYL ACETATE	13934	N/A	N/A	N/A	N/A
DIMETHYLTETRAHYDRO BENZALDEHYDE	2500	2500	N/A	N/A	N/A
ROSE KETONE-4	N/A	2500	N/A	N/A	N/A
EUGENOL	2500	N/A	N/A	N/A	N/A
Eucalyptol	2480	N/A	N/A	N/A	N/A

**Irritation/Corrosion**

## SECTION 11: Toxicological information

Product/ingredient name	Result	Species	Score	Exposure	Observation
3,5,5-trimethylhexyl acetate LINALOOL	Skin - Moderate irritant	Rabbit	-	-	-
	Eyes - Moderate irritant	Rabbit	-	1 hours 0.1 MI	-
	Eyes - Moderate irritant	Rabbit	-	100 uL	-
	Skin - Mild irritant	Human	-	72 hours 32 %	-
	Skin - Mild irritant	Man	-	48 hours 16 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 mg	-
2,6-DIMETHYL-7-OCTEN-2-OL	Skin - Moderate irritant	Guinea pig	-	24 hours 100 mg	-
	Skin - Severe irritant	Rabbit	-	24 hours 100 mg	-
	Eyes - Mild irritant	Rabbit	-	7.5 %	-
CITRONELLOL	Skin - Mild irritant	Rabbit	-	4 hours 0.5 MI	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Eyes - Moderate irritant	Rabbit	-	0.42 %	-
	Skin - Moderate irritant	Man	-	48 hours 16 mg	-
	Skin - Moderate irritant	Rabbit	-	4 hours 0.42 %	-
	Skin - Severe irritant	Guinea pig	-	24 hours 100 mg	-
	Skin - Severe irritant	Rabbit	-	4 hours 0.5 MI	-
	Skin - Severe irritant	Rabbit	-	24 hours 100 mg	-
PHENETHYL ALCOHOL	Eyes - Mild irritant	Rabbit	-	10 minutes	-
	Eyes - Severe irritant	Rabbit	-	12 g	-
	Skin - Mild irritant	Guinea pig	-	24 hours 750 ug	-
	Skin - Moderate irritant	Guinea pig	-	100 %	-
	Skin - Moderate irritant	Guinea pig	-	24 hours 100 mg	-
D_LIMONENE	Skin - Moderate irritant	Rabbit	-	24 hours 100 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 10 %	-
LAURALDEHYDE	Skin - Mild irritant	Human	-	48 hours 5 mg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 mg	-
Tetrahydro-4-methyl-2-(2-methylpropen-1-yl)pyran 4-METHYL-3-DECEN-5-OL	Skin - Moderate irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Mild irritant	Guinea pig	-	48 hours 0.1 %	-
NEROL	Skin - Mild irritant	Guinea pig	-	10 %	-
	Eyes - Moderate irritant	Rabbit	-	0.1 MI	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 mg	-
CITRAL	Skin - Mild irritant	Human	-	24 hours 40 mg	-
	Skin - Moderate irritant	Guinea pig	-	48 hours 1 %	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Severe irritant	Guinea pig	-	24 hours 100 mg	-

**SECTION 11: Toxicological information**

CINNAMYL ALCOHOL	Skin - Severe irritant	Man	-	48 hours 16 mg	-
	Skin - Severe irritant	Pig	-	48 hours 50 mg	-
	Skin - Severe irritant	Rabbit	-	24 hours 100 mg	-
LINALYL ACETATE	Skin - Moderate irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Moderate irritant	Guinea pig	-	24 hours 100 mg	-
EUGENOL	Skin - Severe irritant	Rabbit	-	24 hours 100 mg	-
	Skin - Mild irritant	Human	-	48 hours 40 mg	-
	Skin - Mild irritant	Pig	-	48 hours 50 mg	-
	Skin - Moderate irritant	Guinea pig	-	24 hours 100 mg	-
	Skin - Moderate irritant	Man	-	48 hours 16 mg	-
	Skin - Severe irritant	Rabbit	-	24 hours 100 mg	-

**Conclusion/Summary**

- Skin** : Based on available data, the classification criteria are not met.
- Eyes** : Calculation method Causes serious eye irritation.
- Respiratory** : Based on available data, the classification criteria are not met.

**Sensitisation****Conclusion/Summary**

- Skin** : Calculation method May cause an allergic skin reaction.
- Respiratory** : Based on available data, the classification criteria are not met.

**Mutagenicity**

- Conclusion/Summary** : Based on available data, the classification criteria are not met.

**Carcinogenicity**

- Conclusion/Summary** : Based on available data, the classification criteria are not met.

**Reproductive toxicity**

- Conclusion/Summary** : Based on available data, the classification criteria are not met.

**Teratogenicity**

- Conclusion/Summary** : Based on available data, the classification criteria are not met.

**Specific target organ toxicity (single exposure)**

Product/ingredient name	Category	Route of exposure	Target organs
Distillates (petroleum), hydro- treated light	Category 3	-	Narcotic effects

**Specific target organ toxicity (repeated exposure)**

Not available.

**Aspiration hazard**

Product/ingredient name	Result
Distillates (petroleum), hydro- treated light	ASPIRATION HAZARD - Category 1
D_LIMONENE	ASPIRATION HAZARD - Category 1

**Information on likely routes of exposure** : Not available.

**Potential acute health effects**

## SECTION 11: Toxicological information

<b>Eye contact</b>	: Causes serious eye irritation.
<b>Inhalation</b>	: No known significant effects or critical hazards.
<b>Skin contact</b>	: May cause an allergic skin reaction.
<b>Ingestion</b>	: No known significant effects or critical hazards.

### Symptoms related to the physical, chemical and toxicological characteristics

<b>Eye contact</b>	: Adverse symptoms may include the following: pain or irritation watering redness
<b>Inhalation</b>	: No specific data.
<b>Skin contact</b>	: Adverse symptoms may include the following: irritation redness
<b>Ingestion</b>	: No specific data.

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

#### Short term exposure

<b>Potential immediate effects</b>	: Not available.
<b>Potential delayed effects</b>	: Not available.

#### Long term exposure

<b>Potential immediate effects</b>	: Not available.
<b>Potential delayed effects</b>	: Not available.

#### Potential chronic health effects

Not available.

<b>Conclusion/Summary</b>	: Based on available data, the classification criteria are not met.
<b>General</b>	: Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
<b>Carcinogenicity</b>	: No known significant effects or critical hazards.
<b>Mutagenicity</b>	: No known significant effects or critical hazards.
<b>Reproductive toxicity</b>	: No known significant effects or critical hazards.

## 11.2 Information on other hazards

### 11.2.1 Endocrine disrupting properties

Not available.

### 11.2.2 Other information

Not available.

## SECTION 12: Ecological information

### 12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
2,2-dimethyl-1,3-dioxolan-4-ylmethanol LINALOOL	Acute LC50 16.7 g/L Fresh water	Fish - Pimephales promelas	96 hours
PHENETHYL ALCOHOL	Acute EC50 36.7 ppm Fresh water	Daphnia - Daphnia magna	48 hours
LIMONENE	Acute LC50 28.8 ppm Fresh water	Fish - Oncorhynchus mykiss	96 hours
	LC50 215 mg/l	Fish	96 hours
	Acute EC50 28.2 mg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute EC50 20.2 mg/l Fresh water	Fish - Pimephales promelas - Juvenile (Fledgling, Hatchling, Weanling)	96 hours

**SECTION 12: Ecological information**

D_LIMONENE	Acute EC50 421 µg/l Fresh water Acute EC50 688 µg/l Fresh water	Daphnia - Daphnia magna Fish - Pimephales promelas - Juvenile (Fledgling, Hatchling, Weanling)	48 hours 96 hours
EUGENOL	Acute LC50 24000 µg/l Fresh water	Fish - Pimephales promelas - Juvenile (Fledgling, Hatchling, Weanling)	96 hours
Eucalyptol	Acute LC50 102000 µg/l Fresh water	Fish - Pimephales promelas	96 hours

**Conclusion/Summary** : Calculation method Harmful to aquatic life with long lasting effects.

**12.2 Persistence and degradability**

Product/ingredient name	Test	Result	Dose	Inoculum
LINALOOL	-	62.4 % - Readily - 28 days	-	-
2-Ethyl-4-(2,2,3-trimethyl-3-cyclopenten-1-yl)-2-buten-1-ol	-	0 % - 28 days	-	-
EUGENOL	-	50 % - Readily - 7 days	-	-

**Conclusion/Summary** : Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
LINALOOL	-	-	Readily
2-Ethyl-4-(2,2,3-trimethyl-3-cyclopenten-1-yl)-2-buten-1-ol	-	-	Not readily
EUGENOL	-	-	Readily

**12.3 Bioaccumulative potential**

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
3,5,5-trimethylhexyl acetate	-	1622	high
LINALOOL	2.84	-	low
2,6-DIMETHYL-7-OCTEN-2-OL	3.25	-	low
2-Ethyl-4-(2,2,3-trimethyl-3-cyclopenten-1-yl)-2-buten-1-ol	4.4	667	high
p-Methoxybenzaldehyde	1.76	-	low
Methyl ionone (mixture of isomers)	4.5 to 5	-	high
CITRONELLOL	3.41	-	low
PHENETHYL ALCOHOL	1.36	-	low
BENZYL ACETATE	1.96	8	low
LIMONENE	4.57	-	high
D_LIMONENE	4.38	-	high
NEROL	3.47	-	low
CITRAL	2.76	89.72	low
CINNAMYL ALCOHOL	1.636	5	low
LINALYL ACETATE	3.9	173.9	low
EUGENOL	2.27	-	low
Eucalyptol	2.74	-	low

**12.4 Mobility in soil**

**Soil/water partition coefficient (K<sub>oc</sub>)** : Not available.

**Mobility** : Not available.

**12.5 Results of PBT and vPvB assessment**

## SECTION 12: Ecological information

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

### 12.6 Endocrine disrupting properties

Not available.

### 12.7 Other adverse effects

No known significant effects or critical hazards.

## SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

### 13.1 Waste treatment methods

#### Product

**Methods of disposal** : The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

**Hazardous waste** : Within the present knowledge of the supplier, this product is not regarded as hazardous waste, as defined by EU Directive 2008/98/EC.

#### European waste catalogue (EWC)

Waste code	Waste designation
20 03 01	mixed municipal waste

#### Packaging

**Methods of disposal** : The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

**Special precautions** : This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

## SECTION 14: Transport information

For long distance transport of bulk material or shrunk pallet take into consideration sections 7 and 10.

	ADR/RID	ADN	IMDG	IATA
<b>14.1 UN number or ID number</b>	Not regulated.	Not regulated.	Not regulated.	Not regulated.
<b>14.2 UN proper shipping name</b>	-	-	-	-
<b>14.3 Transport hazard class(es)</b>	-	-	-	-
<b>14.4 Packing group</b>	-	-	-	-
<b>14.5 Environmental hazards</b>	No.	No.	No.	No.



## SECTION 14: Transport information

**14.6 Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**14.7 Maritime transport in bulk according to IMO instruments** : Not available.

## SECTION 15: Regulatory information

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

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

**Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles** : None.

Other EU regulations

Ozone depleting substances (1005/2009/EU)

Not listed.

Prior Informed Consent (PIC) (649/2012/EU)

Not listed.

Persistent Organic Pollutants

Not listed.

Seveso Directive

This product is not controlled under the Seveso Directive.

**15.2 Chemical safety assessment** : No Chemical Safety Assessment has been carried out.

## SECTION 16: Other information

Indicates information that has changed from previously issued version.

**Abbreviations and acronyms**

: ATE = Acute Toxicity Estimate  
 CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]  
 DMEL = Derived Minimal Effect Level  
 DNEL = Derived No Effect Level  
 EUH statement = CLP-specific Hazard statement  
 PBT = Persistent, Bioaccumulative and Toxic  
 PNEC = Predicted No Effect Concentration  
 RRN = REACH Registration Number  
 vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
Eye Irrit. 2, H319	Calculation method
Skin Sens. 1, H317	Calculation method
Aquatic Chronic 3, H412	Calculation method

**SECTION 16: Other information****Full text of abbreviated H statements**

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.
H336	May cause drowsiness or dizziness.
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.

**Full text of classifications [CLP/GHS]**

Acute Tox. 4	ACUTE TOXICITY - Category 4
Aquatic Acute 1	SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1
Aquatic Chronic 1	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1
Aquatic Chronic 2	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2
Aquatic Chronic 3	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3
Asp. Tox. 1	ASPIRATION HAZARD - Category 1
Eye Irrit. 2	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2
Flam. Liq. 3	FLAMMABLE LIQUIDS - Category 3
Repr. 2	REPRODUCTIVE TOXICITY - Category 2
Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2
Skin Sens. 1	SKIN SENSITISATION - Category 1
Skin Sens. 1A	SKIN SENSITISATION - Category 1A
Skin Sens. 1B	SKIN SENSITISATION - Category 1B
STOT SE 3	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3

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**Notice to reader**

**To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.**

**Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.**