



# SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:  
Regulation (EC) No. 1907/2006

Supersedes Date 03-01-2023

Revision date 07-02-2023

Revision Number 3

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

### 1.1. Product identifier

Product Name AXE REFILL STICKS FOR ALUMINIUM VENT AIR FRESHENER - ALASKA

Product Code(s) 71065

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

Recommended use Air freshener

Uses advised against None known

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

#### Supplier

Energizer France SAS  
2 Rue Jacques Daguerre  
92500 Rueil-Malmaison  
France  
Tel: +44(0)8000353376  
ConsumerServiceEU@energizer.com

### 1.4. Emergency telephone number

Emergency Telephone 1-314-985-1511 Int'l: 1-800-526-4727  
This number is only available during the following office hours: Mon-Fri 09:00 AM - 05:00 PM

Austria	Vergiftungsinformationszentrale Notruf-Telefon: +43 1 406 43 43
Belgium	Poison Control Centre, Belgique Tel: 070 245 245; Luxembourg Tel: (+352) 8002-5500
France	Numéro ORFILA (INRS) : + 33 (0)1 45 42 59 59
Germany	Poison Control Center - Charité - Universitätsmedizin Berlin, (+49) 30 30686700
Ireland	Emergency medical information: 8am-10pm (seven days) contact National Poisons Information Centre, Beaumont Hospital, Dublin 9 DOV2NO, Ireland. Telephone Number: +353 (0)1 809 2166
Italy	Roma – Tel: 06-68593726 (CAV "Osp. Pediatrico Bambino Gesù" Dip. Emergenza e Accettazione DEA) Roma – Tel: 06-3054343 (CAV Policlinico "A. Gemelli") Roma – Tel: 06-49978000 (CAV Policlinico "Umberto I") Foggia – Tel: 800183459 (Az. Osp. Univ. Foggia) Napoli – Tel: 081-5453333 (Az. Osp. "A. Cardarelli") Firenze – Tel: 055-7947819 (Az. Osp. "Careggi" U.O. Tossicologia Medica) Pavia – Tel: 0382-24444 (CAV Centro Nazionale di Informazione Tossicologica) Milano – Tel: 02-66101029 (Osp. Niguarda Ca' Granda) Bergamo – Tel: 800883300 (Azienda Ospedaliera Papa Giovanni XXII)

	Verona – Tel: 800011858 (Azienda Ospedaliera Integrata Verona)
Netherlands	Nationaal Vergiftigingen Informatie Centrum. Tel 030 274 88 88 (Uitsluitend bestemd om professionele hulpverleners te informeren bij acute vergiftigingen)
Poland	Bureau for Chemical Substances, Tel: +48 42 2538 400
Portugal	Centro de informação antivenenos. Tel 800 250 250
Spain	+34 91 562 04 20
Switzerland	Tox Info Suisse +41 44 251 51 51 (Emergency Number 145)

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Skin corrosion/irritation	Category 2 - (H315)
Serious eye damage/eye irritation	Category 2 - (H319)
Skin sensitization	Category 1 - (H317)
Chronic aquatic toxicity	Category 3 - (H412)

### 2.2. Label elements

Contains Coumarin, hexyl cinnamic aldehyde, Isomenthone, Isocyclemone E, Pentadecan-15-olide, Linalyl acetate, Linalool, Eucalyptol, Methyl 2,4-dihydroxy-3,6-dimethylbenzoate, d-Limonene, 2,2-dimethyl-3-(4(2)- ethylphenyl)propanal



#### Signal word

Warning

#### Hazard statements

H315 - Causes skin irritation.

H317 - May cause an allergic skin reaction.

H319 - Causes serious eye irritation.

H412 - Harmful to aquatic life with long lasting effects.

#### Precautionary Statements - EU (§28, 1272/2008)

P101 - If medical advice is needed, have product container or label at hand.

P102 - Keep out of reach of children.

P302 + P352 - IF ON SKIN: Wash with plenty of water.

P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention.

P501 - Dispose of contents/container in accordance with national regulations.

#### Exemptions from CLP Article 17 [Article 29(2)]

CLP Annex I - 1.5.2.1. Labelling of packages where the contents do not exceed 125 ml. The following are not required for labelling: H315. H319.

### 2.3. Other hazards

The product does not contain any substance(s) classified as PBT or vPvB

**Endocrine Disruptor Information** This product does not contain any known or suspected endocrine disruptors.

**SECTION 3: Composition/information on ingredients****3.1 Substances**

Not applicable

**3.2 Mixtures**

Chemical name	Weight-%	REACH registration number	EC No (EU Index No)	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Specific concentration limit (SCL)	M-Factor	M-Factor (long-term)
Perlite 130885-09-5	25 - <50%	-	-	[C]	-	-	-
2,6-dimethylheptan-2-ol 13254-34-7	5 - <10%	01-2120275178-48-0000	236-244-1	Eye Irrit. 2 (H319) Skin Irrit. 2 (H315)	-	-	-
3,5,5-Trimethylhexyl acetate 58430-94-7	2.5 - <5%	01-2119972325-34-0000	261-245-9	Aquatic Chronic 2 (H411) Skin Irrit. 2 (H315)	-	-	-
Pentadecan-15-olide 106-02-5	1 - <2.5%	01-2119987323-31-0000	203-354-6	Aquatic Chronic 2 (H411) Skin Sens. 1B (H317)	-	-	-
Linalyl acetate 115-95-7	1 - <2.5%	01-2119454789-19-0000	204-116-4	Eye Irrit. 2 (H319) Skin Irrit. 2 (H315) Skin Sens. 1B (H317)	-	-	-
Linalool 78-70-6	1 - <2.5%	01-2119474016-42-0000	201-134-4	Eye Irrit. 2 (H319) Skin Irrit. 2 (H315) Skin Sens. 1B (H317)	-	-	-
Coumarin 91-64-5	1 - <2.5%	01-2119949300-45-0000	202-086-7	Acute Tox. 3 (H301) Acute Tox. 3 (H311) Acute Tox. 3 (H331) Aquatic Chronic 2 (H411) Skin Sens. 1 (H317)	-	-	-
Allyl (cyclohexyloxy)acetate 68901-15-5	1 - <2.5%	01-2120770514-54-0000	272-657-3	Acute Tox. 4 (H302) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	-	1	1
A mixture of: cis-tetrahydro-2-isobutyl-4-methylpyran-4-ol; trans-tetrahydro-2-isobutyl-4-methylpyran-4-ol 63500-71-0	1 - <2.5%	-	405-040-6	Eye Irrit. 2 (H319)	-	-	-
Methyl 2,4-dihydroxy-3,6-dimethylbenzoate 4707-47-5	0.1 - <0.5%	01-2120762759-36-0000	225-193-0	Skin Sens. 1B (H317)	-	-	-
Isomenthone 491-07-6	0.1 - <0.5%	01-2119983786-15-0000	207-727-4	Skin Irrit. 2 (H315) Skin Sens. 1 (H317)	-	-	-
Isocyclemone E 54464-57-2	0.1 - <0.5%	01-2119489989-04-0000	259-174-3	Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410) Skin Irrit. 2 (H315) Skin Sens. 1 (H317)	-	1	1
hexyl cinnamic	0.1 -	01-2119533092-50-00	202-983-3	Skin Sens. 1 (H317)	-	-	-

aldehyde 101-86-0	<0.5%	00					
Eucalyptol 470-82-6	0.1 - <0.5%	01-2119967772-24-00 00	207-431-5	Flam. Liq. 3 (H226) Skin Sens. 1B (H317)	-	-	-
d-Limonene 5989-27-5	0.1 - <0.5%	01-2119529223-47-00 00	227-813-5	Aquatic Acute 1 (H400) Aquatic Chronic 3 (H412) Asp. Tox. 1 (H304) Flam. Liq. 3 (H226) Skin Irrit. 2 (H315) Skin Sens. 1B (H317)	-	1	-
2,2-dimethyl-3-(4(2)- ethylphenyl)propanal 67634-15-5	0.1 - <0.5%	01-2120758796-34-00 00	266-819-2	Aquatic Acute 1 (H400) Aquatic Chronic 2 (H411) Skin Irrit. 2 (H315) Skin Sens. 1B (H317)	-	1	-

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

*[C] - Components with occupational exposure limits and/or biological occupational exposure limits requiring monitoring*

Full text of H- and EUH-phrases: see section 16

#### Acute Toxicity Estimate

If LD50/LC50 data is not available or does not correspond to the classification category, then the appropriate conversion value from CLP Annex I, Table 3.1.2, is used to calculate the acute toxicity estimate (ATEmix) for classifying a mixture based on its components

Chemical name	Oral LD50 mg/kg	Dermal LD50 mg/kg	Inhalation LC50 - 4 hour - dust/mist - mg/L	Inhalation LC50 - 4 hour - vapor - mg/L	Inhalation LC50 - 4 hour - gas - ppm
2,6-dimethylheptan-2-ol 13254-34-7	6800	-	-	-	-
3,5,5-Trimethylhexyl acetate 58430-94-7	4250	-	-	-	-
Linalyl acetate 115-95-7	14550	-	-	-	-
Linalool 78-70-6	2790	5610	-	-	-
Coumarin 91-64-5	293	293	0.5	-	-
Allyl (cyclohexyloxy)acetate 68901-15-5	620.42	-	-	-	-
hexyl cinnamic aldehyde 101-86-0	3100	3000	-	-	-
Eucalyptol 470-82-6	2480	-	-	-	-
d-Limonene 5989-27-5	5200	-	-	-	-

This product does not contain candidate substances of very high concern at a concentration  $\geq 0.1\%$  (Regulation (EC) No. 1907/2006 (REACH), Article 59)

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

General advice	Show this safety data sheet to the doctor in attendance.
Inhalation	Remove to fresh air. Get medical attention immediately if symptoms occur.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get medical attention if irritation develops and persists.
Skin contact	May cause an allergic skin reaction. In the case of skin irritation or allergic reactions see a physician. Wash off immediately with soap and plenty of water for at least 15 minutes.
Ingestion	Rinse mouth. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Call a physician.
Self-protection of the first aider	Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8).

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

Symptoms	Itching. Rashes. Hives. May cause redness and tearing of the eyes. Burning sensation.
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#### **4.3. Indication of any immediate medical attention and special treatment needed**

Note to physicians	May cause sensitization in susceptible persons. Treat symptomatically.
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### **SECTION 5: Firefighting measures**

#### **5.1. Extinguishing media**

Suitable Extinguishing Media	Dry chemical, CO <sub>2</sub> , alcohol-resistant foam or water spray. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Large Fire	CAUTION: Use of water spray when fighting fire may be inefficient.
Unsuitable extinguishing media	Do not scatter spilled material with high pressure water streams.

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

Specific hazards arising from the chemical	Product is or contains a sensitizer. May cause sensitization by skin contact.
Hazardous combustion products	Thermal decomposition can lead to release of irritating gases and vapors.

#### **5.3. Advice for firefighters**

Special protective equipment and precautions for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.
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### **SECTION 6: Accidental release measures**

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

Personal precautions	Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.
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**Other information** Refer to protective measures listed in Sections 7 and 8.

**For emergency responders** Use personal protection recommended in Section 8.

## **6.2. Environmental precautions**

**Environmental precautions** Prevent further leakage or spillage if safe to do so.

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

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Use personal protective equipment as required. Do not touch or walk through spilled material. Cover liquid spill with sand, earth or other noncombustible absorbent material. Pick up and transfer to properly labeled containers.

**Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

## **6.4. Reference to other sections**

**Reference to other sections** See section 8 for more information. See section 13 for more information.

# **SECTION 7: Handling and storage**

## **7.1. Precautions for safe handling**

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse.

**General hygiene considerations** Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Avoid contact with skin, eyes or clothing.

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

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place.

**Storage class (TRGS 510)** Storage class 11.

## **7.3. Specific end use(s)**

**Risk Management Methods (RMM)** The information required is contained in this Safety Data Sheet.

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

## **8.1. Control parameters**

### **Exposure Limits**

Chemical name	Cyprus	Czech Republic	Denmark	Estonia	Finland
d-Limonene 5989-27-5	-	-	-	TWA: 25 ppm TWA: 150 mg/m <sup>3</sup> STEL: 50 ppm	TWA: 25 ppm TWA: 140 mg/m <sup>3</sup> STEL: 50 ppm

				STEL: 300 mg/m <sup>3</sup>	STEL: 280 mg/m <sup>3</sup>
Chemical name	France	Germany TRGS	Germany DFG	Greece	Hungary
d-Limonene 5989-27-5	TWA: 1000 mg/m <sup>3</sup> STEL: 1500 mg/m <sup>3</sup>	TWA: 5 ppm TWA: 28 mg/m <sup>3</sup> Sh+ H*	TWA: 5 ppm TWA: 28 mg/m <sup>3</sup> Peak: 20 ppm Peak: 112 mg/m <sup>3</sup> * skin sensitizer	-	-
Chemical name	Ireland	Italy MDLPS	Italy AIDII	Latvia	Lithuania
Perlite 130885-09-5	-	-	-	TWA: 4 mg/m <sup>3</sup>	-
d-Limonene 5989-27-5	-	-	-	-	J+ TWA: 25 ppm TWA: 150 mg/m <sup>3</sup> STEL: 50 ppm STEL: 300 mg/m <sup>3</sup>
Chemical name	Luxembourg	Malta	Netherlands	Norway	Poland
d-Limonene 5989-27-5	-	-	-	TWA: 25 ppm TWA: 140 mg/m <sup>3</sup> A+ STEL: 37.5 ppm STEL: 175 mg/m <sup>3</sup>	-
Chemical name	Portugal	Romania	Slovakia	Slovenia	Spain
d-Limonene 5989-27-5	-	-	-	TWA: 28 mg/m <sup>3</sup> TWA: 5 ppm STEL: 20 ppm STEL: 112 mg/m <sup>3</sup> K*	TWA: 30 ppm TWA: 168 mg/m <sup>3</sup> vía dérmica* Sen+
Chemical name	Sweden		Switzerland	United Kingdom	
d-Limonene 5989-27-5	NGV: 25 ppm NGV: 150 mg/m <sup>3</sup> S+		S+ TWA: 7 ppm TWA: 40 mg/m <sup>3</sup> STEL: 14 ppm STEL: 80 mg/m <sup>3</sup>	-	

**Biological occupational exposure limits** This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

**Derived No Effect Level (DNEL) - Workers**

Chemical name	Oral	Dermal	Inhalation
2,6-dimethylheptan-2-ol 13254-34-7	-	1.14 mg/kg bw/day [4] [6] 4.56 mg/kg bw/day [4] [7] 2.85 mg/cm <sup>2</sup> [5] [6] 11.4 mg/cm <sup>2</sup> [5] [7]	4.02 mg/m <sup>3</sup> [4] [6] 16.08 mg/m <sup>3</sup> [4] [7] 10.05 mg/m <sup>3</sup> [5] [6] 40.2 mg/m <sup>3</sup> [5] [7]
3,5,5-Trimethylhexyl acetate 58430-94-7	-	0.8 mg/kg bw/day [4] [6]	5.64 mg/m <sup>3</sup> [4] [6]
Linalyl acetate 115-95-7	-	2.5 mg/kg bw/day [4] [6] 236.2 µg/cm <sup>2</sup> [5] [6] 236.2 µg/cm <sup>2</sup> [5] [7]	2.75 mg/m <sup>3</sup> [4] [6]
Linalool 78-70-6	-	2.5 mg/kg bw/day [4] [6] 5 mg/kg bw/day [4] [7] 3 mg/cm <sup>2</sup> [5] [6] 3 mg/cm <sup>2</sup> [5] [7]	2.8 mg/m <sup>3</sup> [4] [6] 16.5 mg/m <sup>3</sup> [4] [7]
Coumarin 91-64-5	-	0.79 mg/kg bw/day [4] [6]	6.78 mg/m <sup>3</sup> [4] [6]

Chemical name	Oral	Dermal	Inhalation
Allyl (cyclohexyloxy)acetate 68901-15-5	-	0.448 mg/kg bw/day [4] [6]	3.16 mg/m <sup>3</sup> [4] [6]
A mixture of: cis-tetrahydro-2-isobutyl-4-methylpyra n-4-ol; trans-tetrahydro-2-isobutyl-4-methylpyr an-4-ol 63500-71-0	-	41.7 mg/kg bw/day [4] [6]	44.1 mg/m <sup>3</sup> [4] [6]
Methyl 2,4-dihydroxy-3,6-dimethylbenzoate 4707-47-5	-	2500 µg/cm <sup>2</sup> [5] [6]	-
Eucalyptol 470-82-6	-	2 mg/kg bw/day [4] [6]	7.05 mg/m <sup>3</sup> [4] [6]

**[4]** Systemic health effects.

**[5]** Local health effects.

**[6]** Long term.

**[7]** Short term.

**Derived No Effect Level (DNEL) - General Public**

Chemical name	Oral	Dermal	Inhalation
2,6-dimethylheptan-2-ol 13254-34-7	0.57 mg/kg bw/day [4] [6] 2.28 mg/kg bw/day [4] [7]	1.43 mg/cm <sup>2</sup> [5] [6] 5.7 mg/cm <sup>2</sup> [5] [7]	0.99 mg/m <sup>3</sup> [4] [6] 3.97 mg/m <sup>3</sup> [4] [7] 2.48 mg/m <sup>3</sup> [5] [6] 9.91 mg/m <sup>3</sup> [5] [7]
3,5,5-Trimethylhexyl acetate 58430-94-7	0.4 mg/kg bw/day [4] [6]	-	1.4 mg/m <sup>3</sup> [4] [6]
Linalyl acetate 115-95-7	0.2 mg/kg bw/day [4] [6]	236.2 µg/cm <sup>2</sup> [5] [6] 236.2 µg/cm <sup>2</sup> [5] [7]	0.68 mg/m <sup>3</sup> [4] [6]
Linalool 78-70-6	0.2 mg/kg bw/day [4] [6] 1.2 mg/kg bw/day [4] [7]	2.5 mg/kg bw/day [4] [6] 2.5 mg/kg bw/day [4] [7] 1.5 mg/cm <sup>2</sup> [5] [6] 1.5 mg/cm <sup>2</sup> [5] [7]	0.7 mg/m <sup>3</sup> [4] [6] 4.1 mg/m <sup>3</sup> [4] [7]
Coumarin 91-64-5	0.39 mg/kg bw/day [4] [6]	-	1.69 mg/m <sup>3</sup> [4] [6]
Allyl (cyclohexyloxy)acetate 68901-15-5	0.16 mg/kg bw/day [4] [6]	-	0.557 mg/m <sup>3</sup> [4] [6]
A mixture of: cis-tetrahydro-2-isobutyl-4-methylpyra n-4-ol; trans-tetrahydro-2-isobutyl-4-methylpyr an-4-ol 63500-71-0	7.5 mg/kg bw/day [4] [6]	-	13 mg/m <sup>3</sup> [4] [6]
Methyl 2,4-dihydroxy-3,6-dimethylbenzoate 4707-47-5	-	1250 µg/cm <sup>2</sup> [5] [6]	-
Eucalyptol 470-82-6	600 mg/kg bw/day [4] [6]	-	1.74 mg/m <sup>3</sup> [4] [6]

**[4]** Systemic health effects.

**[5]** Local health effects.

**[6]** Long term.

**[7]** Short term.

**Predicted No Effect Concentration (PNEC)**

Chemical name	Freshwater	Freshwater (intermittent release)	Marine water	Marine water (intermittent release)	Air
2,6-dimethylheptan-2-ol 13254-34-7	0.02377 mg/L	0.2377 mg/L	0.00238 mg/L	0.2377 mg/L	-
3,5,5-Trimethylhexyl acetate 58430-94-7	7.7 µg/L	77 µg/L	0.77 µg/L	77 µg/L	-
Pentadecan-15-olide 106-02-5	2.7 µg/L	-	0.27 µg/L	-	-
Linalyl acetate 115-95-7	0.011 mg/L	0.11 mg/L	0.0011 mg/L	-	-
Linalool 78-70-6	0.2 mg/L	2 mg/L	0.02 mg/L	-	-
Coumarin 91-64-5	19 µg/L	14.2 µg/L	1.9 µg/L	-	-
Allyl (cyclohexyloxy)acetate 68901-15-5	2.05 µg/L	2.05 µg/L	0.205 µg/L	0.205 µg/L	-
A mixture of: cis-tetrahydro-2-isobutyl-4- methylpyran-4-ol; trans-tetrahydro-2-isobutyl- 4-methylpyran-4-ol 63500-71-0	0.094 mg/L	0.94 mg/L	0.0094 mg/L	-	-
Methyl 2,4-dihydroxy-3,6-dimethyl benzoate 4707-47-5	3.3 µg/L	-	0.33 µg/L	-	-
Eucalyptol 470-82-6	57 µg/L	0.57 mg/L	5.7 µg/L	-	-

Chemical name	Freshwater sediment	Marine sediment	Sewage treatment	Soil	Food chain
2,6-dimethylheptan-2-ol 13254-34-7	0.89 mg/kg sediment dw	0.089 mg/kg sediment dw	8 mg/L	0.177 mg/kg soil dw	-
3,5,5-Trimethylhexyl acetate 58430-94-7	2.895 mg/kg sediment dw	0.29 mg/kg sediment dw	10 mg/L	0.573 mg/kg soil dw	-
Pentadecan-15-olide 106-02-5	21 mg/kg sediment dw	4.2 mg/kg sediment dw	10 mg/L	5.44 mg/kg soil dw	-
Linalyl acetate 115-95-7	0.609 mg/kg sediment dw	0.0609 mg/kg sediment dw	1 mg/L	0.115 mg/kg soil dw	-
Linalool 78-70-6	2.22 mg/kg sediment dw	0.222 mg/kg sediment dw	10 mg/L	0.327 mg/kg soil dw	7.8 mg/kg food
Coumarin 91-64-5	0.15 mg/kg sediment dw	0.015 mg/kg sediment dw	6.4 mg/L	0.018 mg/kg soil dw	30.7 mg/kg food
Allyl (cyclohexyloxy)acetate 68901-15-5	38.7 µg/kg sediment dw	3.87 µg/kg sediment dw	0.3 mg/L	0.375 mg/kg soil dw	-
A mixture of: cis-tetrahydro-2-isobutyl-4- methylpyran-4-ol; trans-tetrahydro-2-isobutyl-	0.412 mg/kg sediment dw	0.0412 mg/kg sediment dw	10 mg/L	0.0902 mg/kg soil dw	-

Chemical name	Freshwater sediment	Marine sediment	Sewage treatment	Soil	Food chain
4-methylpyran-4-ol 63500-71-0					
Methyl 2,4-dihydroxy-3,6-dimethyl benzoate 4707-47-5	89 µg/kg sediment dw	8.9 µg/kg sediment dw	10 mg/L	16 µg/kg soil dw	-
Eucalyptol 470-82-6	1.425 mg/kg sediment dw	0.1425 mg/kg sediment dw	10 mg/L	0.25 mg/kg soil dw	40 mg/kg food

## 8.2. Exposure controls

<b>Engineering controls</b>	Eyewash stations. Showers. Ventilation systems. Apply technical measures to comply with the occupational exposure limits.
<b>Personal protective equipment</b>	
<b>Eye/face protection</b>	Eye protection must conform to standard EN 166. Wear safety glasses with side shields (or goggles).
<b>Hand protection</b>	Ensure that the breakthrough time of the glove material is not exceeded. Refer to glove supplier for information on breakthrough time for specific gloves. Gloves must conform to standard EN 374. Wear suitable gloves. Impervious gloves.
<b>Skin and body protection</b>	Wear suitable protective clothing. Long sleeved clothing.
<b>Respiratory protection</b>	No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.
<b>General hygiene considerations</b>	Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Avoid contact with skin, eyes or clothing.
<b>Environmental exposure controls</b>	Keep container closed when not in use.

## SECTION 9: Physical and chemical properties

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

<b>Physical state</b>	Solid
<b>Appearance</b>	solid
<b>Color</b>	No information available
<b>Odor</b>	Characteristic
<b>Odor threshold</b>	No data available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
<b>Melting point / freezing point</b>		No data available
<b>Initial boiling point and boiling range</b>		No data available
<b>Flammability</b>		No data available
<b>Flammability Limit in Air</b>		No data available
<b>Upper flammability or explosive limits</b>		No data available
<b>Lower flammability or explosive limits</b>		No data available
<b>Flash point</b>		No data available

Autoignition temperature	No data available
Decomposition temperature	No data available
pH	No data available
pH (as aqueous solution)	No data available
Kinematic viscosity	No data available
Dynamic viscosity	No data available
Water solubility	No data available
Solubility(ies)	No data available
Partition coefficient	No data available
Vapor pressure	No data available
Relative density	No data available
Bulk density	No data available
Liquid Density	No data available
Relative vapor density	No data available
Particle characteristics	
Particle Size	No data available
Particle Size Distribution	No data available

## **9.2. Other information**

### **9.2.1. Information with regard to physical hazard classes**

Not applicable

### **9.2.2. Other safety characteristics**

No information available

## **SECTION 10: Stability and reactivity**

### **10.1. Reactivity**

Reactivity None under normal use conditions.

### **10.2. Chemical stability**

Stability Stable under normal conditions.

#### **Explosion data**

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

### **10.3. Possibility of hazardous reactions**

Possibility of hazardous reactions None under normal processing.

### **10.4. Conditions to avoid**

Conditions to avoid Excessive heat.

### **10.5. Incompatible materials**

Incompatible materials Strong acids. Strong bases. Strong oxidizing agents.

### **10.6. Hazardous decomposition products**

Hazardous decomposition products None known based on information supplied.

## **SECTION 11: Toxicological information**

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

#### Information on likely routes of exposure

##### Product Information

<b>Inhalation</b>	Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract.
<b>Eye contact</b>	Specific test data for the substance or mixture is not available. Causes serious eye irritation. (based on components). May cause redness, itching, and pain.
<b>Skin contact</b>	May cause sensitization by skin contact. Specific test data for the substance or mixture is not available. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. (based on components). Causes skin irritation.
<b>Ingestion</b>	Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

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

<b>Symptoms</b>	Itching. Rashes. Hives. Redness. May cause redness and tearing of the eyes.
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#### Acute toxicity

##### Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document

<b>ATEmix (oral)</b>	4,031.00 mg/kg
<b>ATEmix (dermal)</b>	12,467.50 mg/kg
<b>ATEmix (inhalation-gas)</b>	99,999.00 ppm
<b>ATEmix (inhalation-dust/mist)</b>	23.30 mg/l
<b>ATEmix (inhalation-vapor)</b>	139.30 mg/l

##### Unknown acute toxicity

##### Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
2,6-dimethylheptan-2-ol	= 6800 mg/kg ( Rat )	-	-
3,5,5-Trimethylhexyl acetate	= 4250 mg/kg ( Rat )	> 5000 mg/kg ( Rabbit )	-
Pentadecan-15-olide	> 5 g/kg ( Rat )	-	-
Linalyl acetate	= 14550 mg/kg ( Rat )	> 5000 mg/kg ( Rabbit )	-
Linalool	= 2790 mg/kg ( Rat )	= 5610 mg/kg ( Rabbit )	-
Coumarin	> 5000 mg/kg ( Rat )	= 293 mg/kg ( Rat )	-
Allyl (cyclohexyloxy)acetate	-	> 2000 mg/kg ( Rat )	-
A mixture of: cis-tetrahydro-2-isobutyl-4-methylpyran-4-ol; trans-tetrahydro-2-isobutyl-4-methylpyran-4-ol	-	> 2000 mg/kg ( Rabbit )	-
Methyl 2,4-dihydroxy-3,6-dimethylbenz	-	> 5000 mg/kg ( Rat )	-

oate			
hexyl cinnamic aldehyde	= 3100 mg/kg ( Rat )	> 3000 mg/kg ( Rabbit )	> 5 mg/L ( Rat ) 4 h
Eucalyptol	= 2480 mg/kg ( Rat )	-	-
d-Limonene	= 5200 mg/kg ( Rat ) = 4400 mg/kg ( Rat )	> 5 g/kg ( Rabbit )	-

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

<b>Skin corrosion/irritation</b>	Classification based on data available for ingredients. Causes skin irritation.
<b>Serious eye damage/eye irritation</b>	Classification based on data available for ingredients. Causes serious eye irritation.
<b>Respiratory or skin sensitization</b>	May cause an allergic skin reaction.
<b>Germ cell mutagenicity</b>	Based on available data, the classification criteria are not met.
<b>Carcinogenicity</b>	Based on available data, the classification criteria are not met.
<b>Reproductive toxicity</b>	Based on available data, the classification criteria are not met.
<b>STOT - single exposure</b>	Based on available data, the classification criteria are not met.
<b>STOT - repeated exposure</b>	Based on available data, the classification criteria are not met.
<b>Aspiration hazard</b>	Based on available data, the classification criteria are not met.

**11.2. Information on other hazards**

**11.2.1. Endocrine disrupting properties**

**Endocrine disrupting properties** No information available.

**11.2.2. Other information**

**Other adverse effects** No information available.

**SECTION 12: Ecological information**

**12.1. Toxicity**

**Ecotoxicity** Harmful to aquatic life with long lasting effects.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
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2,6-dimethylheptan-2-ol	EC50: =8.38mg/L (72h, <i>Desmodesmus subspicatus</i> ) EC50: =9.31mg/L (96h, <i>Desmodesmus subspicatus</i> ) EC50: =2.7mg/L (96h, <i>Pseudokirchneriella subcapitata</i> ) EC50: =6.2mg/L (96h, <i>Desmodesmus subspicatus</i> )	LC50: =5.77mg/L (96h, <i>Pimephales promelas</i> ) LC50: =1.04mg/L (96h, <i>Pimephales promelas</i> ) LC50: =5.7mg/L (96h, <i>Pimephales promelas</i> ) LC50: =1.8mg/L (96h, <i>Oncorhynchus mykiss</i> ) LC50: 4.78 - 8.85mg/L (96h, <i>Oncorhynchus mykiss</i> ) LC50: 3.6 - 5.1mg/L (96h, <i>Lepomis macrochirus</i> )	-	EC50: =17.1mg/L (48h, <i>Daphnia magna</i> ) EC50: =3mg/L (48h, <i>Daphnia magna</i> ) EC50: =320mg/L (48h, <i>Daphnia magna</i> ) EC50: =8.5mg/L (48h, <i>Daphnia magna</i> ) EC50: 4.78 - 8.87mg/L (48h, <i>Daphnia magna</i> )
3,5,5-Trimethylhexyl acetate	-	LC50: =7.7mg/L (96h, <i>Pimephales promelas</i> )	-	-
Linalyl acetate	-	LC50: =11mg/L (96h, <i>Cyprinus carpio</i> )	-	-
Linalool	EC50: =88.3mg/L (96h, <i>Desmodesmus subspicatus</i> )	LC50: =27.8mg/L (96h, <i>Oncorhynchus mykiss</i> )	-	EC50: =20mg/L (48h, <i>Daphnia magna</i> )
Eucalyptol	-	LC50: 95.4 - 109mg/L (96h, <i>Pimephales promelas</i> )	-	-
d-Limonene	-	LC50: 0.619 - 0.796mg/L (96h, <i>Pimephales promelas</i> ) LC50: =35mg/L (96h, <i>Oncorhynchus mykiss</i> )	-	-

## 12.2. Persistence and degradability

**Persistence and degradability** No information available.

## 12.3. Bioaccumulative potential

### Bioaccumulation

#### Component Information

Chemical name	Partition coefficient
2,6-dimethylheptan-2-ol	3
3,5,5-Trimethylhexyl acetate	4.6
Pentadecan-15-olide	5.79
Linalyl acetate	3.9
Linalool	2.9
Allyl (cyclohexyloxy)acetate	2.8
A mixture of: cis-tetrahydro-2-isobutyl-4-methylpyran-4-ol; trans-tetrahydro-2-isobutyl-4-methylpyran-4-ol	1.65
Methyl 2,4-dihydroxy-3,6-dimethylbenzoate	2.6
Isomenthone	3.05
Isocyclemone E	5.7
Eucalyptol	3.4
d-Limonene	4.38

## 12.4. Mobility in soil

**Mobility in soil** No information available.

## 12.5. Results of PBT and vPvB assessment

**PBT and vPvB assessment** The product does not contain any substance(s) classified as PBT or vPvB.

Chemical name	PBT and vPvB assessment
2,6-dimethylheptan-2-ol	The substance is not PBT / vPvB
3,5,5-Trimethylhexyl acetate	The substance is not PBT / vPvB
Pentadecan-15-olide	The substance is not PBT / vPvB
Linalyl acetate	The substance is not PBT / vPvB
Linalool	The substance is not PBT / vPvB
Coumarin	The substance is not PBT / vPvB
Allyl (cyclohexyloxy)acetate	The substance is not PBT / vPvB
A mixture of: cis-tetrahydro-2-isobutyl-4-methylpyran-4-ol; trans-tetrahydro-2-isobutyl-4-methylpyran-4-ol	The substance is not PBT / vPvB
Methyl 2,4-dihydroxy-3,6-dimethylbenzoate	The substance is not PBT / vPvB
Eucalyptol	The substance is not PBT / vPvB
d-Limonene	The substance is not PBT / vPvB

## 12.6. Endocrine disrupting properties

**Endocrine disrupting properties** No information available.

## 12.7. Other adverse effects

No information available.

# SECTION 13: Disposal considerations

## 13.1. Waste treatment methods

<b>Waste from residues/unused products</b>	Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.
<b>Contaminated packaging</b>	Do not reuse empty containers.
<b>Waste codes / waste designations according to EWC</b>	According to the European Waste Catalog, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user based on the application for which the product was used.

# SECTION 14: Transport information

## IATA

14.1 UN number or ID number	Not regulated
14.2 UN proper shipping name	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user	
Special Provisions	None

## IMDG

14.1 UN number or ID number	Not regulated
14.2 UN proper shipping name	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazards	Not applicable

#### 14.6 Special precautions for user

##### Special Provisions

None

#### 14.7 Maritime transport in bulk according to IMO instruments

No information available

#### RID

##### 14.1 UN number or ID number

Not regulated

##### 14.2 UN proper shipping name

Not regulated

##### 14.3 Transport hazard class(es)

Not regulated

##### 14.4 Packing group

Not regulated

##### 14.5 Environmental hazards

Not applicable

#### 14.6 Special precautions for user

##### Special Provisions

None

#### ADR

##### 14.1 UN number or ID number

Not regulated

##### 14.2 UN proper shipping name

Not regulated

##### 14.3 Transport hazard class(es)

Not regulated

##### 14.4 Packing group

Not regulated

##### 14.5 Environmental hazards

Not applicable

#### 14.6 Special precautions for user

##### Special Provisions

None

## SECTION 15: Regulatory information

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

#### National regulations

##### France

##### Occupational Illnesses (R-463-3, France)

Chemical name	French RG number
d-Limonene 5989-27-5	RG 84

##### Germany

Water hazard class (WGK) obviously hazardous to water (WGK 2)

#### European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

#### Authorizations and/or restrictions on use:

This product contains one or more substance(s) subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

Chemical name	Restricted substance per REACH Annex XVII	Substance subject to authorization per REACH Annex XIV
Linalool - 78-70-6	75.	-
A mixture of: cis-tetrahydro-2-isobutyl-4-methylpyran-4-ol; trans-tetrahydro-2-isobutyl-4-methylpyran-4-ol - 63500-71-0	75.	-
d-Limonene - 5989-27-5	75.	-

#### Persistent Organic Pollutants

Not applicable

**Ozone-depleting substances (ODS) regulation (EC) 1005/2009**

Not applicable

**EU - Plant Protection Products (1107/2009/EC)**

Chemical name	EU - Plant Protection Products (1107/2009/EC)
Eucalyptol - 470-82-6	Plant protection agent
d-Limonene - 5989-27-5	Plant protection agent

**International Inventories**

Contact supplier for inventory compliance status

**15.2. Chemical safety assessment**

**Chemical Safety Report**

No information available

**SECTION 16: Other information**

**Key or legend to abbreviations and acronyms used in the safety data sheet**

**Full text of H-Statements referred to under section 3**

H226 - Flammable liquid and vapor  
H301 - Toxic if swallowed  
H302 - Harmful if swallowed  
H304 - May be fatal if swallowed and enters airways  
H311 - Toxic in contact with skin  
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  
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

**Legend**

SVHC: Substances of Very High Concern for Authorization:  
PBT: Persistent, Bioaccumulative, and Toxic (PBT) Chemicals  
vPvB: Very Persistent and very Bioaccumulative (vPvB) Chemicals

**Legend Section 8: Exposure controls/personal protection**

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)  
Ceiling Maximum limit value \* Skin designation  
+ Sensitizers

Classification procedure	
Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used
Acute oral toxicity	Calculation method
Acute dermal toxicity	Calculation method

Acute inhalation toxicity - gas	Calculation method
Acute inhalation toxicity - vapor	Calculation method
Acute inhalation toxicity - dust/mist	Calculation method
Skin corrosion/irritation	Calculation method
Serious eye damage/eye irritation	Calculation method
Respiratory sensitization	Calculation method
Skin sensitization	Calculation method
Mutagenicity	Calculation method
Carcinogenicity	Calculation method
Reproductive toxicity	Calculation method
STOT - single exposure	Calculation method
STOT - repeated exposure	Calculation method
Acute aquatic toxicity	Calculation method
Chronic aquatic toxicity	Calculation method
Aspiration hazard	Calculation method
Ozone	Calculation method

**Key literature references and sources for data used to compile the SDS**

U.S. Environmental Protection Agency ChemView Database  
European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA\_RAC)  
European Chemicals Agency (ECHA) (ECHA\_API)  
EPA (Environmental Protection Agency)  
International Uniform Chemical Information Database (IUCLID)  
National Institute of Technology and Evaluation (NITE)  
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)  
NIOSH (National Institute for Occupational Safety and Health)  
National Toxicology Program (NTP)  
New Zealand's Chemical Classification and Information Database (CCID)  
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications  
World Health Organization

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**Further information** This safety data sheet was created pursuant to the requirements of: Commission Regulation (EU) 2020/878 of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

**Disclaimer**

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**End of Safety Data Sheet**