



SAFETY DATA SHEET

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

Supersedes Date 19-05-2021

Revision date 15-12-2022

Revision Number 2

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

1.1. Product identifier

Product Name AXE MINI VENT AIR FRESHENER - AFRICA

Product Code(s) 71024

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

National emergency telephone number - Not applicable	
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)
United Kingdom	Product information has been submitted to the UK National Poisons Information Service (NPIS) and is accessible to medical health professionals.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Skin corrosion/irritation	Category 2 - (H315)
Skin sensitization	Category 1 - (H317)
Chronic aquatic toxicity	Category 2 - (H411)

2.2. Label elements

Contains Isocyclemone E, hexyl cinnamic aldehyde, Coumarin, Geraniol, Isomenthone, Methyl 2,4-dihydroxy-3,6-dimethylbenzoate, 3,7-dimethyloctan-3-ol, Benzyl salicylate, Citronellol, Nerol, Linalyl acetate, Eucalyptol, 3-(p-methoxyphenyl)-2-methylpropionaldehyde, Linalool, (E)-1-(2,6,6-trimethyl-1,3-cyclohexadien-1-yl)-2-buten-1-one



Signal word

Warning

Hazard statements

H315 - Causes skin irritation.

H317 - May cause an allergic skin reaction.

H411 - Toxic 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, H411.

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)
Sulfuric acid, calcium salt, hydrate (1:1:2) 10101-41-4	50 - <100%	-	-	[C]	-	-	-
Isocyclemone E 54464-57-2	2.5 - <5%	01-2119489989-04-00 00	259-174-3	Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410) Skin Irrit. 2 (H315) Skin Sens. 1 (H317)	-	1	1
2,6-dimethylheptan-2-ol 13254-34-7	2.5 - <5%	01-2120275178-48-00 00	236-244-1	Eye Irrit. 2 (H319) Skin Irrit. 2 (H315)	-	-	-
Methyl 2,4-dihydroxy-3,6-dimethylbenzoate 4707-47-5	1 - <2.5%	01-2120762759-36-00 00	225-193-0	Skin Sens. 1B (H317)	-	-	-
hexyl cinnamic aldehyde 101-86-0	1 - <2.5%	01-2119533092-50-00 00	202-983-3	Skin Sens. 1 (H317)	-	-	-
ethyl vanillin 121-32-4	1 - <2.5%	01-2119958961-24-00 00	204-464-7	Eye Irrit. 2 (H319)	-	-	-
Coumarin 91-64-5	1 - <2.5%	01-2119949300-45-00 00	202-086-7	Acute Tox. 3 (H301) Acute Tox. 3 (H311) Acute Tox. 3 (H331) Aquatic Chronic 2 (H411) Skin Sens. 1 (H317)	-	-	-
3,7-dimethyloctan-3-ol 78-69-3	1 - <2.5%	01-2119454788-21-00 00	201-133-9	Eye Irrit. 2 (H319) Skin Irrit. 2 (H315) Skin Sens. 1B (H317)	-	-	-
Geraniol 106-24-1	0.5 - <1%	01-2119552430-49-00 00	203-377-1	Eye Dam. 1 (H318) Skin Irrit. 2 (H315) Skin Sens. 1 (H317)	-	-	-
Benzyl salicylate 118-58-1	0.5 - <1%	01-2119969442-31-00 00	204-262-9	Aquatic Chronic 3 (H412) Eye Irrit. 2 (H319) Skin Sens. 1B (H317)	-	-	-
Nerol 106-25-2	0.025 - <0.25%	01-2119983244-33-00 00	203-378-7	Eye Irrit. 2 (H319) Skin Irrit. 2 (H315) Skin Sens. 1B (H317)	-	-	-
Linalyl acetate 115-95-7	0.025 - <0.25%	01-2119454789-19-00 00	204-116-4	Eye Irrit. 2 (H319) Skin Irrit. 2 (H315) Skin Sens. 1B (H317)	-	-	-
Linalool 78-70-6	0.025 - <0.25%	01-2119474016-42-00 00	201-134-4	Eye Irrit. 2 (H319) Skin Irrit. 2 (H315) Skin Sens. 1B (H317)	-	-	-
Isomenthone	0.025 -	01-2119983786-15-00	207-727-4	Skin Irrit. 2 (H315)	-	-	-

491-07-6	<0.25%	00		Skin Sens. 1 (H317)			
Eucalyptol 470-82-6	0.025 - <0.25%	01-2119967772-24-00 00	207-431-5	Flam. Liq. 3 (H226) Skin Sens. 1B (H317)	-	-	-
Citronellol 106-22-9	0.025 - <0.25%	01-2119453995-23-00 00	203-375-0	Eye Irrit. 2 (H319) Skin Irrit. 2 (H315) Skin Sens. 1B (H317)	-	-	-
3-(p-methoxyphenyl)-2-methylpropional dehyde 5462-06-6	0.025 - <0.25%	01-2120629103-67-00 00	226-749-5	Skin Sens. 1B (H317)	-	-	-
(E)-1-(2,6,6-trimethyl-1,3-cyclohexadien-1-yl)-2-buten-1-one 23726-93-4	<0.025%	01-2120105798-49-00 00	245-844-2	Aquatic Chronic 2 (H411) Skin Irrit. 2 (H315) Skin Sens. 1A (H317)	-	-	-

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
Sulfuric acid, calcium salt, hydrate (1:1:2) 10101-41-4	3000	-	-	-	-
2,6-dimethylheptan-2-ol 13254-34-7	6800	-	-	-	-
hexyl cinnamic aldehyde 101-86-0	3100	3000	-	-	-
Coumarin 91-64-5	293	293	0.5	-	-
Geraniol 106-24-1	3600	-	-	-	-
Benzyl salicylate 118-58-1	2227	-	-	-	-
Nerol 106-25-2	4500	-	-	-	-
Linalyl acetate 115-95-7	14550	-	-	-	-
Linalool 78-70-6	2790	5610	-	-	-
Eucalyptol 470-82-6	2480	-	-	-	-
Citronellol 106-22-9	3450	2650	-	-	-

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 thoroughly with plenty of water, also under the eyelids. Remove contact lenses, if present and easy to do. Continue rinsing. 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.

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

Note to physicians May cause sensitization in susceptible persons. Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable Extinguishing Media Dry chemical, CO₂, 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.

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.

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.

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	European Union	Austria	Belgium	Bulgaria	Croatia
Sulfuric acid, calcium salt, hydrate (1:1:2) 10101-41-4	-	TWA: 5 mg/m ³ STEL 10 mg/m ³	TWA: 10 mg/m ³	TWA: 6.0 mg/m ³ TWA: 10.0 mg/m ³	TWA: 4 mg/m ³ TWA: 10 mg/m ³
Chemical name	France	Germany TRGS	Germany DFG	Greece	Hungary
Sulfuric acid, calcium salt, hydrate (1:1:2) 10101-41-4	TWA: 10 mg/m ³	TWA: 6 mg/m ³	-	TWA: 5 mg/m ³ TWA: 10 mg/m ³	TWA: 4 mg/m ³ TWA: 1.5 mg/m ³

Geraniol 106-24-1	-	-	skin sensitizer	-	-
Chemical name	Ireland	Italy MDLPS	Italy AIDII	Latvia	Lithuania
Sulfuric acid, calcium salt, hydrate (1:1:2) 10101-41-4	TWA: 10 mg/m ³ TWA: 4 mg/m ³ STEL: 30 mg/m ³ STEL: 12 mg/m ³	-	TWA: 10 mg/m ³	TWA: 4 mg/m ³	-
Chemical name	Luxembourg	Malta	Netherlands	Norway	Poland
Sulfuric acid, calcium salt, hydrate (1:1:2) 10101-41-4	-	-	-	-	TWA: 10 mg/m ³
Chemical name	Portugal	Romania	Slovakia	Slovenia	Spain
Sulfuric acid, calcium salt, hydrate (1:1:2) 10101-41-4	TWA: 10 mg/m ³	TWA: 10 mg/m ³	TWA: 1.5 mg/m ³	TWA: 6 mg/m ³	TWA: 10 mg/m ³
Chemical name	Sweden		Switzerland		United Kingdom
Sulfuric acid, calcium salt, hydrate (1:1:2) 10101-41-4	-		TWA: 3 mg/m ³		TWA: 10 mg/m ³ TWA: 4 mg/m ³ STEL: 30 mg/m ³ STEL: 12 mg/m ³

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 ² [5] [6] 11.4 mg/cm ² [5] [7]	4.02 mg/m ³ [4] [6] 16.08 mg/m ³ [4] [7] 10.05 mg/m ³ [5] [6] 40.2 mg/m ³ [5] [7]
Methyl 2,4-dihydroxy-3,6-dimethylbenzoate 4707-47-5	-	2500 µg/cm ² [5] [6]	-
ethyl vanillin 121-32-4	-	7 mg/kg bw/day [4] [6]	49 mg/m ³ [4] [6] 98 mg/m ³ [4] [7]
Coumarin 91-64-5	-	0.79 mg/kg bw/day [4] [6]	6.78 mg/m ³ [4] [6]
3,7-dimethyloctan-3-ol 78-69-3	-	3.16 mg/kg bw/day [4] [6] 190 µg/cm ² [5] [6]	11.14 mg/m ³ [4] [6]
Geraniol 106-24-1	-	12.5 mg/kg bw/day [4] [6] 11800 µg/cm ² [5] [6]	161.6 mg/m ³ [4] [6]
Benzyl salicylate 118-58-1	-	2.21 mg/kg bw/day [4] [6]	7.8 mg/m ³ [4] [6]
Nerol 106-25-2	-	1.25 mg/kg bw/day [4] [6]	4.4 mg/m ³ [4] [6]
Linalyl acetate 115-95-7	-	2.5 mg/kg bw/day [4] [6] 236.2 µg/cm ² [5] [6] 236.2 µg/cm ² [5] [7]	2.75 mg/m ³ [4] [6]
Linalool 78-70-6	-	2.5 mg/kg bw/day [4] [6] 5 mg/kg bw/day [4] [7] 3 mg/cm ² [5] [6] 3 mg/cm ² [5] [7]	2.8 mg/m ³ [4] [6] 16.5 mg/m ³ [4] [7]
Eucalyptol 470-82-6	-	2 mg/kg bw/day [4] [6]	7.05 mg/m ³ [4] [6]
Citronellol 106-22-9	-	327.4 mg/kg bw/day [4] [6] 2950 µg/cm ² [5] [7]	161.6 mg/m ³ [4] [6] 10 mg/m ³ [5] [6]

Chemical name	Oral	Dermal	Inhalation
			10 mg/m ³ [5] [7]
3-(p-methoxyphenyl)-2-methylpropionaldehyde 5462-06-6	-	1.8 mg/kg bw/day [4] [6] 3992.3 µg/cm ² [5] [6]	6.35 mg/m ³ [4] [6]
(E)-1-(2,6,6-trimethyl-1,3-cyclohexadien-1-yl)-2-buten-1-one 23726-93-4	-	0.77 mg/kg bw/day [4] [6]	2.71 mg/m ³ [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 ² [5] [6] 5.7 mg/cm ² [5] [7]	0.99 mg/m ³ [4] [6] 3.97 mg/m ³ [4] [7] 2.48 mg/m ³ [5] [6] 9.91 mg/m ³ [5] [7]
Methyl 2,4-dihydroxy-3,6-dimethylbenzoate 4707-47-5	-	1250 µg/cm ² [5] [6]	-
ethyl vanillin 121-32-4	2.5 mg/kg bw/day [4] [6]	-	8.75 mg/m ³ [4] [6] 17.5 mg/m ³ [4] [7]
Coumarin 91-64-5	0.39 mg/kg bw/day [4] [6]	-	1.69 mg/m ³ [4] [6]
3,7-dimethyloctan-3-ol 78-69-3	1.58 mg/kg bw/day [4] [6]	190 µg/cm ² [5] [6]	2.75 mg/m ³ [4] [6]
Geraniol 106-24-1	13.75 mg/kg bw/day [4] [6]	11800 µg/cm ² [5] [6]	47.8 mg/m ³ [4] [6]
Benzyl salicylate 118-58-1	0.79 mg/kg bw/day [4] [6]	-	1.37 mg/m ³ [4] [6]
Nerol 106-25-2	0.62 mg/kg bw/day [4] [6]	-	1.09 mg/m ³ [4] [6]
Linalyl acetate 115-95-7	0.2 mg/kg bw/day [4] [6]	236.2 µg/cm ² [5] [6] 236.2 µg/cm ² [5] [7]	0.68 mg/m ³ [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 ² [5] [6] 1.5 mg/cm ² [5] [7]	0.7 mg/m ³ [4] [6] 4.1 mg/m ³ [4] [7]
Eucalyptol 470-82-6	600 mg/kg bw/day [4] [6]	-	1.74 mg/m ³ [4] [6]
Citronellol 106-22-9	13.8 mg/kg bw/day [4] [6]	2950 µg/cm ² [5] [7]	47.8 mg/m ³ [4] [6] 10 mg/m ³ [5] [6] 10 mg/m ³ [5] [7]
3-(p-methoxyphenyl)-2-methylpropionaldehyde 5462-06-6	1.08 mg/kg bw/day [4] [6]	3992.3 µg/cm ² [5] [6]	1.88 mg/m ³ [4] [6]
(E)-1-(2,6,6-trimethyl-1,3-cyclohexadien-1-yl)-2-buten-1-one 23726-93-4	0.38 mg/kg bw/day [4] [6]	-	0.67 mg/m ³ [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	-
Methyl 2,4-dihydroxy-3,6-dimethyl benzoate 4707-47-5	3.3 µg/L	-	0.33 µg/L	-	-
ethyl vanillin 121-32-4	0.118 mg/L	-	0.0118 mg/L	-	-
Coumarin 91-64-5	19 µg/L	14.2 µg/L	1.9 µg/L	-	-
3,7-dimethyloctan-3-ol 78-69-3	0.0089 mg/L	0.089 mg/L	0.00089 mg/L	-	-
Geraniol 106-24-1	0.0108 mg/L	0.108 mg/L	0.00108 mg/L	-	-
Benzyl salicylate 118-58-1	0.00103 mg/L	0.0103 mg/L	0.000103 mg/L	-	-
Nerol 106-25-2	7.45 µg/L	74.5 µg/L	0.745 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	-	-
Eucalyptol 470-82-6	57 µg/L	0.57 mg/L	5.7 µg/L	-	-
Citronellol 106-22-9	0.0024 mg/L	0.024 mg/L	0.00024 mg/L	-	-
3-(p-methoxyphenyl)-2-methylpropionaldehyde 5462-06-6	5.2 µg/L	-	0.52 µg/L	-	-
(E)-1-(2,6,6-trimethyl-1,3-cyclohexadien-1-yl)-2-buten-1-one 23726-93-4	1.09 µg/L	10.9 µg/L	0.11 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	-
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	-
ethyl vanillin 121-32-4	15 mg/kg sediment dw	1.5 mg/kg sediment dw	10 mg/L	2.923 mg/kg soil dw	-
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
3,7-dimethyloctan-3-ol 78-69-3	0.0821 mg/kg sediment dw	0.00821 mg/kg sediment dw	450 mg/L	0.0112 mg/kg soil dw	-

Chemical name	Freshwater sediment	Marine sediment	Sewage treatment	Soil	Food chain
Geraniol 106-24-1	0.115 mg/kg sediment dw	0.0115 mg/kg sediment dw	0.7 mg/L	0.0167 mg/kg soil dw	-
Benzyl salicylate 118-58-1	0.583 mg/kg sediment dw	0.0583 mg/kg sediment dw	10 mg/L	1.41 mg/kg soil dw	52.7 mg/kg food
Nerol 106-25-2	133 µg/kg sediment dw	13.3 µg/kg sediment dw	12.9 mg/L	22.3 µg/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
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
Citronellol 106-22-9	0.0256 mg/kg sediment dw	0.00256 mg/kg sediment dw	580 mg/L	0.00371 mg/kg soil dw	-
3-(p-methoxyphenyl)-2-methylpropionaldehyde 5462-06-6	0.104 mg/kg sediment dw	10.4 µg/kg sediment dw	3 mg/L	17.8 µg/kg soil dw	-
(E)-1-(2,6,6-trimethyl-1,3-cyclohexadien-1-yl)-2-buten-1-one 23726-93-4	0.087 mg/kg sediment dw	8.67 µg/kg sediment dw	3.2 mg/L	0.017 mg/kg soil dw	6.67 mg/kg food

8.2. Exposure controls

Engineering controls

Eyewash stations. Showers. Ventilation systems. Apply technical measures to comply with the occupational exposure limits.

Personal protective equipment

Eye/face protection

Wear safety glasses with side shields (or goggles). Eye protection must conform to standard EN 166.

Hand protection

Wear suitable gloves. Impervious gloves. 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.

Skin and body protection

Wear suitable protective clothing. Long sleeved clothing.

Respiratory protection

No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations

Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product.

Environmental exposure controls

Keep container closed when not in use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Solid
Appearance	solid
Color	No information available
Odor	Characteristic

Odor threshold No data available

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

Inhalation	Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract.
Eye contact	Specific test data for the substance or mixture is not available.
Skin contact	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.
Ingestion	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

Symptoms Itching. Rashes. Hives. Redness.

Acute toxicity**Numerical measures of toxicity**

Based on available data, the classification criteria are not met

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

ATEmix (oral)	2,565.70 mg/kg
ATEmix (dermal)	3,711.70 mg/kg
ATEmix (inhalation-dust/mist)	38.30 mg/l
ATEmix (inhalation-vapor)	27.60 mg/l

Unknown acute toxicity**Component Information**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Sulfuric acid, calcium salt, hydrate (1:1:2)	> 3000 mg/kg (Rat)	-	> 3.26 mg/L (Rat) 4 h
2,6-dimethylheptan-2-ol	= 6800 mg/kg (Rat)	-	-
Methyl 2,4-dihydroxy-3,6-dimethylbenzoate	-	> 5000 mg/kg (Rat)	-
hexyl cinnamic aldehyde	= 3100 mg/kg (Rat)	> 3000 mg/kg (Rabbit)	> 5 mg/L (Rat) 4 h
ethyl vanillin	= 1590 mg/kg (Rat)	> 2000 mg/kg (Rat)	-
Coumarin	> 5000 mg/kg (Rat)	= 293 mg/kg (Rat)	-

3,7-dimethyloctan-3-ol	> 5 g/kg (Rat)	> 5000 mg/kg (Rabbit)	-
Geraniol	= 3600 mg/kg (Rat)	> 5 g/kg (Rabbit)	-
Benzyl salicylate	= 2227 mg/kg (Rat)	> 5000 mg/kg (Rabbit)	-
Nerol	= 4500 mg/kg (Rat)	> 5 g/kg (Rabbit)	-
Linalyl acetate	= 14550 mg/kg (Rat)	> 5000 mg/kg (Rabbit)	-
Linalool	= 2790 mg/kg (Rat)	= 5610 mg/kg (Rabbit)	-
Eucalyptol	= 2480 mg/kg (Rat)	-	-
Citronellol	= 3450 mg/kg (Rat)	= 2650 mg/kg (Rabbit)	-
3-(p-methoxyphenyl)-2-methylpropionaldehyde	-	> 5000 mg/kg (Rabbit)	-
(E)-1-(2,6,6-trimethyl-1,3-cyclohexadien-1-yl)-2-buten-1-one	-	> 1000 mg/kg (Rabbit)	-

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

Skin corrosion/irritation Classification based on data available for ingredients. Causes skin irritation.

Serious eye damage/eye irritation Based on available data, the classification criteria are not met.

Respiratory or skin sensitization May cause an allergic skin reaction.

Germ cell mutagenicity Based on available data, the classification criteria are not met.

Carcinogenicity Based on available data, the classification criteria are not met.

Reproductive toxicity Based on available data, the classification criteria are not met.

STOT - single exposure Based on available data, the classification criteria are not met.

STOT - repeated exposure Based on available data, the classification criteria are not met.

Aspiration hazard 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**

Toxic to aquatic life with long lasting effects.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Sulfuric acid, calcium salt, hydrate (1:1:2)	-	LC50: =2980mg/L (96h, <i>Lepomis macrochirus</i>) LC50: >1970mg/L (96h, <i>Pimephales promelas</i>)	-	-
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>)
ethyl vanillin	-	LC50: 81.4 - 94.3mg/L (96h, <i>Pimephales promelas</i>)	-	-
3,7-dimethyloctan-3-ol	EC50: =19mg/L (72h, <i>Desmodesmus subspicatus</i>) EC50: =2.7mg/L (96h, <i>Pseudokirchneriella subcapitata</i>) EC50: =6.2mg/L (96h, <i>Desmodesmus subspicatus</i>)	LC50: =8.9mg/L (96h, <i>Danio rerio</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>) LC50: =6.2mg/L (48h, <i>Daphnia magna</i>)
Geraniol	-	LC50: =22mg/L (96h, <i>Danio rerio</i>)	-	-
Benzyl salicylate	-	LC50: =1.03mg/L (96h, <i>Danio rerio</i>)	-	-
Nerol	-	LC50: =20.3mg/L (96h, <i>Danio rerio</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>)	-	-
Citronellol	-	-	-	EC50: =17mg/L (48h, <i>Daphnia magna</i>)

12.2. Persistence and degradability

Persistence and degradability No information available.

12.3. Bioaccumulative potential

Bioaccumulation

Component Information

Chemical name	Partition coefficient
Isocyclemone E	5.7
2,6-dimethylheptan-2-ol	3
Methyl 2,4-dihydroxy-3,6-dimethylbenzoate	2.6
ethyl vanillin	1.61
3,7-dimethyloctan-3-ol	3.3
Geraniol	2.6
Benzyl salicylate	4
Nerol	2.76
Linalyl acetate	3.9
Linalool	2.9
Isomenthone	3.05
Eucalyptol	3.4
Citronellol	3.41
3-(p-methoxyphenyl)-2-methylpropionaldehyde	2.5
(E)-1-(2,6,6-trimethyl-1,3-cyclohexadien-1-yl)-2-buten-1-one	3.4

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
Methyl 2,4-dihydroxy-3,6-dimethylbenzoate	The substance is not PBT / vPvB
ethyl vanillin	The substance is not PBT / vPvB
Coumarin	The substance is not PBT / vPvB
3,7-dimethyloctan-3-ol	The substance is not PBT / vPvB
Geraniol	The substance is not PBT / vPvB
Benzyl salicylate	The substance is not PBT / vPvB
Nerol	The substance is not PBT / vPvB
Linalyl acetate	The substance is not PBT / vPvB
Linalool	The substance is not PBT / vPvB
Eucalyptol	The substance is not PBT / vPvB
Citronellol	The substance is not PBT / vPvB
3-(p-methoxyphenyl)-2-methylpropionaldehyde	The substance is not PBT / vPvB
(E)-1-(2,6,6-trimethyl-1,3-cyclohexadien-1-yl)-2-buten-1-one	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**

Waste from residues/unused products	Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.
Contaminated packaging	Do not reuse empty containers.
Waste codes / waste designations according to EWC	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	UN3077
14.2 UN proper shipping name	Environmentally hazardous substance, solid, n.o.s.(Isocyclemone E, Coumarin)
14.3 Transport hazard class(es)	9
14.4 Packing group	III
Description	UN3077, Environmentally hazardous substance, solid, n.o.s.(Isocyclemone E, Coumarin), 9, III
14.5 Environmental hazards	Yes
14.6 Special precautions for user	
Special Provisions	A97, A158, A179, A197, A215
ERG Code	9L

IMDG

14.1 UN number or ID number	UN3077
14.2 UN proper shipping name	Environmentally hazardous substance, solid, n.o.s.(Isocyclemone E, Coumarin)
14.3 Transport hazard class(es)	9
14.4 Packing group	III
Description	UN3077, Environmentally hazardous substance, solid, n.o.s.(Isocyclemone E, Coumarin), 9, III, Marine pollutant
14.5 Environmental hazards	Yes
14.6 Special precautions for user	
Special Provisions	274, 335, 966, 967, 969
EmS-No	F-A, S-F
14.7 Maritime transport in bulk according to IMO instruments	No information available

RID

14.1 UN number or ID number	UN3077
14.2 UN proper shipping name	Environmentally hazardous substance, solid, n.o.s.(Isocyclemone E, Coumarin)
14.3 Transport hazard class(es)	9
14.4 Packing group	III
Description	UN3077, Environmentally hazardous substance, solid, n.o.s.(Isocyclemone E, Coumarin), 9, III
14.5 Environmental hazards	Yes
14.6 Special precautions for user	
Special Provisions	274, 335, 375, 601
Classification code	M7

ADR

14.1 UN number or ID number	UN3077
14.2 UN proper shipping name	Environmentally hazardous substance, solid, n.o.s.(Isocyclemone E, Coumarin)
14.3 Transport hazard class(es)	9
14.4 Packing group	III

Description	UN3077, Environmentally hazardous substance, solid, n.o.s.(Isocyclemone E, Coumarin), 9, III, (-)
14.5 Environmental hazards	Yes
14.6 Special precautions for user	
Special Provisions	274, 335, 601, 375
Classification code	M7
Tunnel restriction code	(-)

SECTION 15: Regulatory information

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

National regulations

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
Geraniol - 106-24-1	75.	-
Benzyl salicylate - 118-58-1	75.	-
Linalool - 78-70-6	75.	-

Persistent Organic Pollutants

Not applicable

Dangerous substance category per Seveso Directive (2012/18/EU)

E2 - Hazardous to the Aquatic Environment in Category Chronic 2

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)
Geraniol - 106-24-1	Plant protection agent
Eucalyptol - 470-82-6	Plant protection agent

Biocidal Products Regulation (EU) No 528/2012 (BPR)

Chemical name	Biocidal Products Regulation (EU) No 528/2012 (BPR)
Geraniol - 106-24-1	Product-type 18: Insecticides, acaricides and products to control other arthropods Product-type 19: Repellents and attractants

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
H311 - Toxic in contact with skin
H315 - Causes skin irritation
H317 - May cause an allergic skin reaction
H318 - Causes serious eye damage
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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Disclaimer

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End of Safety Data Sheet