1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY UNDERTAKING

1.1 Product identifier

Product name: SEASALT OAKMOSS

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

Concentrated fragrance for manufacturing daily chemical products only.

Not for personal use in this form or concentration.

1.3 Details of the supplier of the SDS

NAME:SHANGHAI HERYNN FRAGRANCES & FLAVORS CO.,LTD.

ADD:The 1-3 Floor, Building 7, No 488 Guanghua Road, Songjiang District, Shanghai P.R.C.

TEL:+86 21 57742892

FAX:+86 21 57654635

Email:mc@herynn.com

PC:201614

1.4 Emergency telephone number

Ireland

Organisation/company	:	National Poisons Information Centre Beaumont Hospital
Address	:	PO Box 1297 Beaumont Road 9 Dublin
Emergency number	:	+353 1 809 2566 (Healthcare professionals-24/7) +353 1 809 2166 (public, 8am-10pm, 7/7)

2. HAZARD IDENTIFICATION

2.1 Classification of the substance or mixture

Product definition: Fragrances compounding

Classification according to Commission Regulation (EU) 2020/878

Skin Sens. 1B, H317

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

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

2.2 Label elements

Hazard pictograms:

Signal words:Warning

Hazard statements

H317 - May cause an allergic skin reaction.

Precautionary statements

Prevention:

P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.

P272 - Contaminated work clothing should not be allowed out of the workplace.

P273 - Avoid release to the environment.

Response:

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

P321 - Specific treatment (see ... on this label).

P331 - Do NOT induce vomiting.

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

P362+P364 - Take off contaminated clothing and wash it before reuse.

P391 - Collect spillage. Hazardous to the aquatic environment

Storage :

P405 - Store locked up.

Disposal:

P501 - Dispose of contents/container in accordance with local regulations

Supplemental label elements: Not applicable

Other hazards

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

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances : A multi-component mixture of natural and/or synthetic aroma materials.

3.2 Mixture:Fragrances Compounding :

We certify that the above product is composed of the following ingredients and does not have any other components.

Component	CAS	EC	Concentration limit	CLASSIFICATIONACCORDING Reg.127212008/CE
naphtha (petroleum), hydrotreated heavy	64742-48-9	265-150-3	40-45	Asp. Tox.1,H304 Har. Classification Muta. 1B,H340 Har. Classification Carc. 1B,H350 Har. Classification
4-tert-butylcyclohexyl acetate	32210-23-4	250-954-9	15-20	Skin Sens. 1B,H317
p-menth-1-en-8-yl acetate	80-26-2	201-265-7	5-6	Aquatic Chronic 2,H411
linalool	78-70-6	201-134-4	5-6	Skin Sens. 1B,H317 Har. Classification
α-hexylcinnamaldehyde	101-86-0	202-983-3	4-5	Skin Sens. 1B,H317 Aquatic Acute 1,H400 Aquatic Chronic 2,H411
methyl 3-oxo-2-pentylcyclopentaneacetate	24851-98-7	246-495-9	3-4	Not Classified
methyl oleate	112-62-9	203-992-5	3-4	Not Classified
2-tert-butylcyclohexyl acetate	88-41-5	201-828-7	2-3	Aquatic Chronic 2,H411
2-ethyl-4-(2,2,3-trimethyl-3-cyclopenten-1-yl)-2-buten-1-ol	28219-61-6	248-908-8	2-3	Eye Irrit. 2,H319 Aquatic Chronic 1,H410
3,6-dimethylcyclohex-3-ene-1-carbaldehyde	67801-65-4	267-186-5	1-2	Acute Tox. 4,H302 Skin Irrit. 2,H315 Skin Sens. 1B,H317 Aquatic Chronic 2,H411
benzyl salicylate	118-58-1	204-262-9	1-2	Skin Sens. 1B, H317 Har. Classification Eye Irrit. 2,H319 Aquatic Chronic 3,H412
geraniol	106-24-1	203-377-1	1-2	Skin Sens. 1,H317 Har. Classification
1-(1,2,3,5,6,7,8,8a-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	68155-66-8	268-978-3	0.5-1	Skin Irrit. 2,H315 Skin Sens. 1B,H317 Aquatic Chronic 2,H411
1-(1,2,3,4,6,7,8,8a-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	68155-67-9	268-979-9	0.5-1	Skin Irrit. 2,H315 Skin Sens. 1B,H317 Aquatic Chronic 2,H411
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	54464-57-2	259-174-3	0.5-1	Skin Irrit. 2,H315 Skin Sens. 1B,H317 Aquatic Chronic 1,H410
coumarin	91-64-5	202-086-7	0.5-1	Skin Sens. 1,H317 Acute Tox. 4 , H302 Aquatic Chronic 3,H412
2-butyl-4,4,6-trimethyl-1,3-dioxane	54546-26-8	259-210-8	0.5-1	Aquatic Chronic 3,H412
3-(2,2-dimethyl-3-hydroxypropyl)toluene	103694-68-4	403-140-4	0.5-1	Aquatic Chronic 3 , H412 Har. Classification
nerol	106-25-2	203-378-7	0.5-1	Skin Irrit. 2,H315 Skin Sens. 1B,H317 Eye Irrit. 2,H319
1-phenylethyl acetate	93-92-5	202-288-5	0.5-1	Not classified
3,7-dimethyloctan-1-ol	106-21-8	203-374-5	0.5-1	Skin Irrit. 2,H315 Eye Irrit. 2,H319 Aquatic Chronic 2,H411
2-methyl-4-(2,2,3-trimethyl-3-cyclopenten-1-yl)-2-buten-1-ol	28219-60-5	248-907-2	0.5-1	Eye Irrit. 2,H319 Aquatic Acute 1,H400 Aquatic Chronic 1,H410
methyl 2,4-dihydroxy-3,6-dimethylbenzoate	4707-47-5	225-193-0	0.4-0.5	Skin Sens. 1B,H317

allyl (3-methylbutoxy)acetate	67634-00-8	266-803-5	0.3-0.4	Acute Tox. 4,H302 Acute Tox. 2,H330 Aquatic Acute 1,H400 Aquatic Chronic 1,H410
linalyl acetate	115-95-7	204-116-4	0.3-0.4	Skin Irrit. 2,H315 Skin Sens. 1B,H317 Eye Irrit. 2,H319
citral	5392-40-5	226-394-6	0.3-0.4	Skin Irrit. 2,H315 Har. Classification Skin Sens. 1,H317 Har. Classification Eye Irrit. 2, H319
1-(2,6,6-trimethyl-3-cyclohexen-1-yl)-2-buten-1-one	57378-68-4	260-709-8	0.1-0.2	Acute Tox. 4,H302 Skin Irrit. 2,H315 Skin Sens. 1,H317 Aquatic Acute 1,H400 Aquatic Chronic 1,H410
1,2,3,5,6,7-hexahydro-1,1,2,3,3-pentamethyl-4h-inden-4-one	33704-61-9	251-649-3	0.1-0.2	Skin Irrit. 2,H315 Skin Sens. 1B,H317 Eye Irrit. 2,H319 Aquatic Chronic 2,H411
bornan-2-one	76-22-2	200-945-0	0.1-0.2	Flam. Sol. 2,H228 Skin Irrit. 2,H315 Eye Dam. 1,H318 Acute Tox. 4,H332 STOT SE 2,H371
cineole	470-82-6	207-431-5	0.1-0.2	Flam. Liq. 3,H226 Skin Sens. 1B,H317
(r)-p-mentha-1,8-diene	5989-27-5	227-813-5	0.05-0.1	Flam. Liq. 3,H226 Har. Classification Asp. Tox. 1 , H304 Har. Classification Skin Irrit. 2,H315 Har. Classification Skin Sens. 1,H317 Har. Classification Aquatic Acute 1,H400 Har. Classification Aquatic Chronic 1,H410 Har. Classification Aquatic Ch
Total:			100	

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

4. FIRST AID MEASURES

4.1 Description of first aid measures

Eye contact:

Get medical attention immediately. Call a poison center or physician. 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. Chemical burns must be treated promptly by a physician.

Inhalation:

Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask

or self-contained breathing apparatus. 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. 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. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Skin contact:

Get medical attention immediately. Call a poison center or physician. 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. Chemical burns must be treated promptly by a physician. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion:

Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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. Chemical burns must be treated promptly by a physician. 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 as a collar, tie, belt or waistband.

Protection of first-aiders:

No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. 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

Potential acute health effects

Eye contact:

Not available.

Inhalation:

Not available.

Skin contact:

Causes skin irritation. May cause an allergic skin reaction.

Ingestion:

Not available.

Over-exposure signs/symptoms:

Not available.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician:

In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Specific treatments:

No specific treatment.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide

Unsuitable extinguishing: High volume water jet

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture:

In a fire or if heated, a pressure increase will occur and the container may burst. 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 thermal decomposition products:

Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides

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.

6. ACCIDENTIAL 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 spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders:

If specialized 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 spilled 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 materials 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 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 spilled 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.

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 breathe vapor or mist. Do not ingest. Avoid release to the environment. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. 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 avoid direct sunlight in a dry, room temperature and well-ventilated area, away from food and drink.

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 unlabeled containers. Use appropriate containment to avoid environmental contamination.

7.3 Specific end use(s)

Recommendations

Industrial use only.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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).

8.1 Control parameter

Occupational exposure limits

Product/ingredient name	Exposure limit values
Pin-2(3)-ene	AGW 140mg/m3 TRGS 900
(R)-p-mentha-1,8-diene	DFG MAC-values list (Germany, 7/2015). Absorbed through skin. Skin sensitizer. Kurzzeitwert: 112 mg/m3, 4 times per shift, 15 minutes. Schichtmittelwert: 5 ppm 8 hours. Kurzzeitwert: 20 ppm, 4 times per shift, 15 minutes. Schicht
Geraniol	DFG MAC-values list (Germany, 7/2015). Skin sensitizer.

DNELs/DMELs

Product/ingredient nam	Type	Exposure	Value	Population	Effects
Pin-2(10)-ene	DNEL	Long term Oral	0.3 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	0.027 mg/cm²	General population	Local
	DNEL	Long term Dermal	0.3 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	1 mg/m³	General population	Systemic
	DNEL	Long term Dermal	0.054 mg/cm²	Workers	Local
	DNEL	Long term Dermal	0.8 mg/kg	Workers	Systemic
	DNEL	Long term Inhalation	5.69 mg/m³	Workers	Systemic
Geranyl acetate	DNEL	Long term Oral	8.9 mg/kg	Consumers	Systemic
		Long term Dermal	17.75 mg/kg	Consumers	Systemic
		Long term Inhalation	15.4 mg/m³	Consumers	Systemic
		Long term Dermal	35.5 mg/kg	Workers	Systemic
		Long term Inhalation	62.59 mg/m³	Workers	Systemic
Terpineol	DNEL	Short term Dermal	5 mg/kg	Workers	Systemic
		Long term Dermal	1.17 mg/kg	Workers	Systemic
		Short term Inhalation	5.8 mg/m³	Workers	Systemic
		Long term Inhalation	5.8 mg/m³	Workers	Systemic
		Short term Oral	2.5 mg/kg bw/day	Consumers	Systemic
		Long term Oral	0.42 mg/kg	Consumers	Systemic
		Short term Dermal	2.5 mg/kg	Consumers	Systemic
		Long term Dermal	0.42 mg/kg	Consumers	Systemic
		Short term Inhalation	1.25 mg/m³	Consumers	Systemic
		Long term Inhalation	1.25 mg/m³	Consumers	Systemic
Cineole	DNEL	Long term Oral	600 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	7.05 mg/m³	Workers	Systemic
	DNEL	Long term Dermal	2 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	1.74 mg/m³	General population	Systemic
	DNEL	Long term Dermal	1 mg/kg bw/day	General population	Systemic
1,2,3,5,6,7-hexahydro-1,1,2,3,3-pentamethyl-4H-inden-4-one	DNEL	Long term Oral	0.25 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	0.25 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	0.42 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	0.44 mg/m³	Workers	Systemic
	DNEL	Long term Inhalation	1.47 mg/m³	Workers	Systemic
Citral	DNEL	Long term Inhalation	9 mg/m³	Workers	Systemic
	DNEL	Long term Inhalation	2.7 mg/m³	Consumers	Systemic
	DNEL	Long term Dermal	1.7 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Dermal	1 mg/kg bw/day	Consumers	Systemic
	DNEL	Long term Oral	0.6 mg/kg bw/day	Consumers	Systemic
	DNEL	Long term Dermal	0.14 mg/cm²	Consumers	Local
	DNEL	Long term Dermal	0.14 mg/cm²	Workers	Local
Coumarin	DNEL	Long term Dermal	0.79 mg/ kg bw/day	Workers	Systemic
		Long term Oral	0.39 mg/ kg bw/day	Consumers	Systemic
		Long term Inhalation	1.69 mg/m³	Consumers	Systemic
		Long term Dermal	0.39 mg/ kg bw/day	Consumers	Systemic
		Long term Inhalation	6.78 mg/m³	Workers	Systemic
Geraniol	DNEL	Long term Dermal	11.8 mg/cm²	Consumers	Local
	DNEL	Long term Dermal	7.5 mg/kg	Consumers	Systemic
	DNEL	Long term Inhalation	47.8 mg/m	Consumers	Systemic
	DNEL	Long term Oral	13.75 mg/kg	Consumers	Systemic
	DNEL	Long term Dermal	11.8 mg/cm²	Workers	Systemic
	DNEL	Long term Dermal	12.5 mg/kg	Workers	Local
	DNEL	Long term Inhalation	161.6 mg/m³	Workers	Systemic
Benzyl salicylate	DNEL	Long term Oral	0.45 mg/ kg bw/day	Consumers	Systemic
		Long term Dermal	0.45 mg/ kg bw/day	Consumers	Systemic
		Long term Inhalation	0.78 mg/m³	Consumers	Systemic
		Long term Dermal	0.9 mg/kg bw/day	Workers	Systemic
		Long term Inhalation	3.17 mg/m³	Workers	Systemic

2-ethyl-4-(2,2,3-trimethyl-3-cyclopenten-1-yl)-2-buten-1-ol	DNEL	Long term Dermal	6 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	21 mg/m³	Workers	Systemic
	DNEL	Long term Inhalation	5.2 mg/m³	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
α-hexylcinnamaldehyde	DNEL	Long term Oral	0.056 mg/kg bw/day	Consumers	Systemic
	DNEL	Long term Dermal	0.079 mg/kg bw/day	Consumers	Local
	DNEL	Long term Dermal	0.079 mg/cm²	Consumers	Local
	DNEL	Long term Dermal	9 mg/kg bw/day	Consumers	Systemic
	DNEL	Short term Inhalation	4.7 mg/m³	Consumers	Local
	DNEL	Long term Inhalation	0.019 mg/m³	Consumers	Systemic
	DNEL	Long term Dermal	0.525 mg/cm²	Workers	Local
	DNEL	Long term Inhalation	0.078 mg/m³	Workers	Systemic
	DNEL	Long term Dermal	18.2 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Inhalation	6.28 mg/m³	Workers	Local
	DNEL	Short term Dermal	0.525 mg/cm²	Workers	Local
Linalool	DNEL	Short term Inhalation	16.5 mg/m³	Workers	Systemic
		Short term Dermal	5 mg/kg bw/day	Consumers	Systemic
		Long term Dermal	15 mg/cm²	Consumers	Local
		Short term Oral	1.2 mg/kg bw/day	Consumers	Systemic
		Short term Inhalation	4.1 mg/m³	Consumers	Systemic
		Short term Dermal	2.5 mg/cm²	Consumers	Systemic
		Short term Dermal	15 mg/cm²	Consumers	Local
		Long term Oral	0.2 mg/kg bw/day	Consumers	Systemic
		Long term Inhalation	0.7 mg/m³	Consumers	Systemic
		Long term Dermal	1.25 mg/ kg bw/day	Consumers	Systemic
		Short term Dermal	15 mg/cm²	Workers	Local
		Long term Dermal	15 mg/cm²	Workers	Local
		Long term Inhalation	2.8 mg/m³	Workers	Systemic
			2.5 mg/kg bw/day	Workers	Systemic

PNECs

Product/ingredient name	Compartment Detail	Value	Method Detail
Geranyl acetate	Soil	0.0859 mg/kg	-
	Marine water sediment	0.0442 mg/kg	-
	Fresh water sediment	0.442 mg/kg	-
	Sewage Treatment Plant	8 mg/l	-
	Intermittent release	37.2 mg/l	-
	Marine water	0.372 mg/l	-
	Fresh water	3.72 mg/l	-
Terpineol	Secondary Poisoning	16.6 mg/kg	-
	Marine water sediment	0.026 mg/kg	-
	Fresh water sediment	0.263 mg/kg	-
	Marine water	0.0012 mg/l	-
	Soil	0.045 mg/kg	-
	Fresh water	0.012 mg/l	-
	Sewage Treatment Plant	2.57 mg/l	-
1,2,3,5,6,7-hexahydro-1,1,2,3,3-pentamethyl-4H-inden-4-one	Fresh water	0.004 mg/l	-
	Marine water	0.0004 mg/l	-
	Fresh water sediment	99.1 µg/kg dwt	-
	Marine water sediment	9.91 µg/kg dwt	-
	Sewage Treatment Plant	10 mg/l	-
	Soil	17.4 µg/kg dwt	-
	Secondary Poisoning	1.11 mg/kg	-

Citral	Fresh water Marine water Fresh water sediment Marine water sediment Soil Sewage Treatment Plant Intermittent release	0.00678 mg/l 0.000678 mg/l 0.125 mg/kg 0.0125 mg/kg 0.0209 mg/kg 1.6 mg/l 0.0678 mg/l	- - - - - - -
Coumarin	Intermittent release Soil Marine water sediment Fresh water sediment Sewage Treatment Plant Marine water Fresh water	0.024 mg/l 0.00371 mg/kg 0.00256 mg/l 0.0256 mg/kg 580 mg/l 0.00024 mg/l 0.0024 mg/l	- - - - - - -
Benzyl salicylate	Fresh water Secondary Poisoning Soil Sewage Treatment Plant Marine water sediment Fresh water sediment Marine water Intermittent release Marine water Fresh water Intermittent release Secondary Poisoning	0.00103 mg/l 80 mg/kg 0.021 mg/kg 10 mg/l 0.0584 mg/kg 0.000103 mg/l 0.0103 mg/l 0.584 mg/kg 0.584 mg/kg 0.00103 mg/l 0.0103 mg/l 80 mg/kg	- - - - - - - - - - - -
2-ethyl-4-(2,2,3-trimethyl-3-cyclopenten-1-yl)-2-buten-1-ol	Fresh water Marine water Fresh water sediment Marine water sediment Soil Sewage Treatment Plant	8.8 µg/l 0.88 µg/l 1.05 mg/kg dwt 0.105 mg/kg wwt 0.206 mg/kg 1 mg/l	- - - - - -
2-tert-butylcyclohexyl acetate	Fresh water Marine water Sediment Marine water sediment Sewage Treatment Plant Sol	0.011 mg/l 0.0011 mg/l 1.5 mg/kg dwt 0.15 mg/kg dwt 10 mg/l 0.293 mg/kg dwt	Assessment Factors Assessment Factors Equilibrium Partitioning Equilibrium Partitioning Assessment Factors Equilibrium Partitioning
Methyl 3-oxo-2-pentylcyclopentaneacetate	Freshwater Intermittent releases (freshwater) Marine water Sewage treatment plant (STP) Sediment (freshwater) Sediment (marine water) Soil	37.2 µg/L 186 µg/L 3.72 µg/L 10 mg/L 1.897 mg/kg sediment dw 189.7 µg/kg sediment dw 357.6 µg/kg soil dw	-

α-hexylcinnamaldehyde	Fresh water Marine water Sewage Treatment Plant Fresh water sediment Marine water sediment Soil Secondary Poisoning Intermittent release	0.00138 mg/l 0.000138 mg/l 10 mg/l 3.2 mg/kg dwt 0.064 mg/kg dwt 9.51 mg/kg dwt 6.6 mg/l 0.03 mg/l	Assessment Factors Assessment Factors Assessment Factors Assessment Factors Equilibrium Partitioning Assessment Factors -
Linalool	Fresh water Intermittent releases (freshwater) Marine water Sewage Treatment Plant Fresh water sediment Marine water sediment Soil Secondary poisoning	200 µg/L 2 mg/l 20 µg/L 10 mg/l 2.22 mg/kg 222 µg/kg 327 µg/kg 7.8 mg/kg food	- - - - - - - -
4-tert-butylcyclohexyl acetate	Fresh water Marine water Intermittent release Fresh water sediment Marine water sediment Soil	0.0053 mg/l 0.00053 mg/l 0.053 mg/l 2.01 mg/kg 0.21 mg/kg 0.42 mg/kg	- - - - - -

8.2 Exposure controls

Appropriate engineering controls:

If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

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.

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 and/or face shield. If inhalation hazards exist, a full-face respirator may be

required instead.

Skin protection

Hand protection:

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. 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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear liquid
Color:	Colorless to slight yellow clear liquids
Odor:	Consistant to the standard sample
Gravity Density:	**0.842~0.862(25/25℃)**
Refrative index:	**1.4372~1.4572(20℃)**
Solubility in water:	Unsoluble
Flash point:	**69℃**
pH:	Not available.
Melting point/freezing point:	Not available.

Initial boiling point and boiling range:	Not available.
Evaporation rate:	Not available.
Upper/lower flammability or explosive limits:	Not available.
Vapor pressure:	Not available.
Vapor density:	Not available.
Relative density:	Not available.
Partition coefficient:	n-octanol/water:Not available.
Auto-ignition temperature:	Not available.
Decomposition temperature:	Not available.
Viscosity:	Not available.
Explosive properties:	Not available.
Oxidizing properties:	Not available.

Further information:

The indicated values do not necessarily correspond to the product specification.

Please refer to the technical information sheet for specification data.

10. STABILITY AND REACTIVITY

10.1 Reactivity No decomposition if used according to specifications.

No dangerous reaction known under conditions of normal use.

10.2 Chemical stability Stable under recommended storage conditions.

Stable under conditions of normal use.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

There is no data available on the mixture itself.

Product/ingredient	Result/Species/Dose	Exposure
Allyl (3-methylbutoxy)acetate	LD50 Rat Oral 730 mg/kg	-
Linalool	LD50 Rabbit Dermal 5610 mg/kg LD50 Rat Dermal 5610 mg/kg LD50 Rat oral 2790 mg/kg LD50:Rabbit dermal 5610 mg/kg	-
α-hexylcinnamaldehyde	LD50 Rat oral 3100mg/KG LC50 Rat Inhalation Dusts and mists >2100 mg/m³ 8 Hours LD50 Rabbit Dermal 3000 mg/kg LD50 Rat Oral 3100 mg/kg	-
Methyl 3-oxo-2-pentylcyclopentaneacetate	LD50 Rat oral 5000mg/KG LDLo Rabbit administration onto the skin 5000mg/KG LD50:Rat inhalation -4h >4.93mg/L	-
2-tert-butylcyclohexyl acetate	LD50 Rat oral 4,600 mg/kg LD50 Dermal rabbit 5,000 mg/kg	-

2-ethyl-4-(2,2,3-trimethyl-3-cyclopenten-1-yl)-2-buten-1-ol	LD50:Rabbit Dermal >4600 mg/kg LD50:Rat Oral 5000 mg/kg	-
Benzyl salicylate	LD50 Oral Rat 2227 mg/kg LD50 Dermal Rabbit 14150 mg/kg	-
Geraniol	LD50:Rabbit Dermal >5000 mg/kg LD50:Rat Oral 3600 mg/kg	-
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	LD50:Rat Dermal >5000 mg/kg LD50:Rat Oral >5000 mg/kg	-
Coumarin	LD50 Rat oral 293 mg/kg	-
Nerol	LD50:Rabbit Dermal > 5000mg/kg LD50:Rat Oral > 4500mg/kg	-
4-tert-butylcyclohexyl acetate	LD50 Dermal Rabbit >5000 mg/kg LD50 Oral Rat 3550 mg/kg	
Methyl 2,4-dihydroxy-3,6-dimethylbenzoate	LD50:Rabbit Dermal >5000 mg/kg LD50:Rat Oral >8000 mg/kg	-
Pin-2(10)-ene	LD50:Rabbit Dermal >5000 mg/kg LD50:Rat Oral >4700 mg/kg	-
Linalyl acetate	LD50 Rat oral 13934 mg/kg LD50 Rabbit Dermal >5000 mg/kg	-
Citral	LD50 Dermal Rabbit 2250 mg/kg LD50 Oral Rat 3.45 g/kg	-
1,2,3,5,6,7-hexahydro-1,1,2,3,3-pentamethyl-4H-inden-4-one	LD50 Oral Rat 2901 mg/kg	-
Cineole	LD50:Oral Rat 2480 mg/kg LD50:Oral Rabit 2480 mg/kg	-
(R)-p-mentha-1,8-diene	LD50 Rat oral 4400 mg/kg LD50 Rat Intraperitoneal 3600mg/kg LDLo Rat Subcutaneous 30200 mg/kg LD50 Rat Intravenous 110mg/kg LD50 Rodent - mouse oral 5600 mg/kg LD50 Rodent - mouse Intraperitoneal 600 mg/kg	-
(Z)-3-hexenyl salicylate	LD50 Rat oral 5 mg/kg LD50 Rabbit Administration onto the skin	-
3,7-dimethylocta-1,3,6-triene	LD50:Rabbit Dermal >5000 mg/kg LD50:Rat Oral 4700 mg/kg	-
DL-borneol	LD50:Oral Rat 5800 mg/kg	
Terpineol	LC50 Inhalation Dusts and mists >4.76 mg/l LD50:Rabbit Dermal >2000 mg/kg LD50:Oral Rat >2000 mg/kg	4 Hours--
Geranyl acetate	LD50 Rat oral 6330 mg/kg LD50:Rabbit Dermal 5460 mg/kg	-
1-phenylethyl acetate	LD50 Rat oral >5000 mg/kg LD50 Dermal rabbit >5000 mg/kg	-

Acute toxicity estimates

No data available

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Terpineol	Eyes - Mild irritant Skin - Moderate irritant	Mammal - species unspecified Rabbit	- -	12.5% 24 hours 500 mg	- -
Citral	Skin - Moderate irritant Skin - Severe irritant Skin - Mild irritant Skin - Severe irritant Skin - Severe irritant Skin - Moderate irritant Skin - Severe irritant Skin - Severe irritant	Guinea pig Guinea pig Human Man Pig Rabbit Rabbit Rabbit	- 	48 hours 1 % 24 hours 100 mg 24 hours 40 mg 48 hours 16 mg 48 hours 50 mg 24 hours 500 mg 24 hours 100 mg 	- - - - - - -
Linalyl acetate	Skin - Moderate irritant Skin - Severe irritant	Guinea pig Rabbit	- -	24 hours 100 mg 24 hours 100 mg	- -
Allyl (3-methylbutoxy)acetate	Skin - Mild irritant	Rabbit	-	-	-
Nerol	Eyes - Moderate irritant Skin - Moderate irritant	Rabbit Rabbit	-	0.1 Milliliters 24 hours 500mg	-
Coumarin	Eyes - Moderate irritant Skin - Severe irritant Skin - Moderate irritant Skin - Moderate irritant Skin - Severe irritant Skin - Severe irritant	Rabbit Guinea pig Man Rabbit Rabbit Rabbit	- - - - - -	0.42% 24 hours 100 mg 24 hours 100 mg 4 hours 0.42 mg 24 hours 100 mg 4 hours 0.5 mg	-
Geraniol	Skin - Mild irritant Skin - Severe irritant Skin - Severe irritant Skin - Severe irritant Skin - Moderate irritant	Guinea pig Guinea pig Human Rabbit Rabbit	- - - - -	30% 24 hours 100mg 48 hours 32% 24 hours 16mg -	-
2-ethyl-4-(2,2,3-trimethyl-3-cyclopenten-1-yl)-2-buten-1-ol	Eyes - Irritant	Mammal - species unspecified	-	-	-
α-hexylcinnamaldehyde	Skin - Erythema/Eschar Eyes - Redness of the conjunctivae	Rabbit Rabbit	2 0.33	-	-
Linalool	Eyes - Moderate irritant Eyes - Moderate irritant Skin - Moderate irritant Skin - Mild irritant Skin - Mild irritant Skin - Mild irritant Skin - Severe irritant	Rabbit Rabbit Guinea pig Human Man Rabbit Rabbit	- - - - - - -	1 hours 0.1 ml 100 microliters 24 hours 100 mg 72 hours 32% 48 hours 16 mg 24 hours 500 mg 24 hours 100 mg	- - - - - - -

Sensitization

Product/ingredient na	Route of exposure	Species	Result
Methyl 2,4-dihydroxy-3,6-dimethylbenzoate	skin	Mouse	Sensitizing

1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	skin	Mouse	Sensitising
Geraniol	Skin	Mouse	Sensitizing
2-ethyl-4-(2,2,3-trimethyl-3-cyclopenten-1-yl)-2-buten-1-ol	skin	Guinea pig	Not sensitizing
α-hexylcinnamaldehyde	skin	Mouse	Sensitising

Mutagenicity

Product/ingredient name	Test	Experiment	Result
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	-	Experiment: In vivo Subject: Mammalian-Animal Experiment: In vitro Subject: Mammalian-Human	Negative Negative
α-hexylcinnamaldehyde	OECD 474 Mammalian Erythrocyte Micronucleus Test OECD 471 Bacterial Reverse Mutation Test	Experiment: In vivo Subject: Mammalian-Animal Experiment: In vitro Subject: Bacteria	Negative Negative

Aspiration hazard

Product/ingredient name	Result
Pin-2(10)-ene	ASPIRATION HAZARD - Category 1
3,7-dimethylocta-1,3,6-triene	ASPIRATION HAZARD - Category 1

Potential acute health effects

Eye contact:

No known significant effects or critical hazards.

Inhalation:

No known significant effects or critical hazards.

Skin contact:

No known significant effects or critical hazards.

Ingestion:

No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact:

No specific data.

Inhalation:

No specific data.

Skin contact:

No specific data.

Ingestion:

No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects:Not available.

Potential delayed effects:Not available.

Long term exposure Potential immediate effects Potential delayed effects:Not available.

Potential delayed effects:Not available.

Potential chronic health effects

General:

Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

Carcinogenicity: No known significant effects or critical hazards.

Mutagenicity: No known significant effects or critical hazards.

Teratogenicity: No known significant effects or critical hazards.

Developmental effects:No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

Interactive effects:Not available.

Toxicokinetics: Not available.

Absorption: Not available.

Distribution: Not available.

Metabolism: Not available.

Elimination: Not available.

Other information:Not available.

12. ECOLOGICAL INFORMATION

12.1 Toxicity

We have no quantitative data concerning the ecological effects of this product.

Product/ingredient name	Result	Species	Exposure
Methyl 2,4-dihydroxy-3,6-dimethylbenzoate	Acute EC50 1.8 mg/l	Daphnia	48 hours
Linalool	Acute EC50 141.4 mg/l Acute EC50 59 mg/l Acute EC50 >100 mg/l Acute LC50 27.8 mg/l	Aquatic plants Daphnia Micro-organism Fish	96 hours 48 hours 3 hours 96 hours
α-hexylcinnamaldehyde	Acute EC50 0.247 mg/l Acute LC50 1.7 mg/l Chronic EC10 0.069 mg/l	Daphnia Fish Fresh water Daphnia	48 hours 96 hours 21 days

2-tert-butylcyclohexyl acetate	Acute EC50 17 mg/l Acute EC50 17 mg/l Acute LC50 1.7 mg/l	Aquatic plants Daphnia Fish	72 hours 48 hours 96 hours
2-ethyl-4-(2,2,3-trimethyl-3-cyclopenten-1-yl)-2-buten-1-ol	Acute EC50 2.5 mg/l Acute EC50 1.4 mg/l Acute LC50 1.34 mg/l Acute LC50 1.1 mg/l Acute NOEC 0.44 mg/l Acute NOEC 0.8 mg/l Acute NOEC 0.49 mg/l	Algae Daphnia Daphnia Fish Algae Daphnia Fish	96 hours 48 hours 48 hours 96 hours 96 hours 48 hours 96 hours
Benzyl salicylate	EC50 1.29 mg/l Acute EC50 1.16 mg/l Acute LC50 1.03 mg/l	Algae - Pseudokirchnerella subcapitata Daphnia - Daphnia magna Fish - Danio rerio	72 hours 48 hours 96 hours
Geraniol	Acute EC50 13.1 mg/l	Algae	72 hours
Geraniol	Acute EC50 7.75 mg/l Acute LC50 22 mg/l	Daphnia Fish	48 hours 96 hours
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	Acute EC50 2.6 mg/l Acute EC50 1.38 mg/l Acute LC50 1.3 mg/l Chronic NOEC 0.028 mg/l Chronic NOEC 0.16 mg/l	Algae Daphnia Fish Daphnia Fish 30	72 hours 48 hours 96 hours 21 days days
4-tert-butylcyclohexyl acetate	Acute EC50 5.3 mg/l Acute LC50 8.6 mg/l	Daphnia Fish	48 hours 96 hours
Nerol	Acute EC50 5.93 mg/l Acute EC50 10.8 mg/l Acute EC50 22 mg/l	Aquatic plants Daphnia Fish	72 hours 48 hours 96 hours
Pin-2(10)-ene	Acute EC50 0.7 mg/l Acute EC50 0.86 mg/l Acute LC50 0.68 mg/l	Algae Daphnia Fish	72 Hours 48 Hours 96 Hours
Linalyl acetate	Acute EC50 15 mg/l Acute LC50 11 mg/l	Daphnia Fish	48 Hours 96 Hours
Citral	Acute EC50 103.8 mg/l Acute EC50 7 mg/l Acute LC50 6.8 mg/l	Aquatic plants Daphnia Fish	72 hours 48 hours 96 hours
1,2,3,5,6,7-hexahydro-1,1,2,3,3-pentamethyl-4H-inden-4-one	Acute EC50 10 mg/l Acute EC50 1.5 mg/l Acute LC50 2.12 mg/l	Algae Daphnia Fish	72 hours 48 hours 96 hours
Cineole	Acute LC50 102000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
(Z)-3-hexenyl salicylate	Acute EC50 0.61 mg/l Acute EC50 2.7 mg/l	Algae Daphnia	72 hours 48 hours
3,7-dimethylocta-1,3,6-triene	Acute EC50 0.7 mg/l Acute EC50 0.86 mg/l Acute LC50 0.68 mg/l	Algae Daphnia Fish	72 Hours 48 Hours 96 Hours
Terpineol	Acute EC50 73 mg/l Acute LC50 80 mg/l	Daphnia Fish	48 hours 96 hours

Geranyl acetate	Acute EC50 3.72 mg/l Acute EC50 14.1 mg/l Acute LC50 68.12 mg/l Chronic EC10 1.2 mg/l	Algae Daphnia Fish Algae	72 hours 48 hours 96 hours -
Coumarin	Acute EC10 580 mg/l	Micro-organism	30 minutes

12.2 Persistence and degradabilit

Product/ingredient nam	Test	Result	Dose	Inoculum
Methyl 2,4-dihydroxy-3,6-dimethylbenzoate	OECD 301F Ready Biodegradability - Manometric Respirometry Test	63 % - Readily - 28 days	-	-
Linalool	OECD 301D Ready Biodegradability - Closed Bottle Test	64% (BOD) in 28 days	-	-
α-hexylcinnamaldehyde	OECD 301F Ready Biodegradability - Manometric Respirometry Test	97 % - Readily - 28 days	-	-
2-tert-butylcyclohexyl acetate	OECD 301F Ready Biodegradability - Manometric Respirometry Test	43 % - Not readily - 28 days	-	-
2-ethyl-4-(2,2,3-trimethyl-3-cyclopenten-1-yl)-2-buten-1-ol	OECD 301D Ready Biodegradability -Closed Bottle Test	5 % - Not readily - 28 days		
Benzyl salicylate	OECD 301F Ready Biodegradability - Manometric Respirometry Test	93 % - Readily - 28 days	-	-
Geraniol	OECD 301B Ready Biodegradability -CO_2 Evolution Test	79 % - Readily - 28 days	-	-
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	OECD 301C Ready Biodegradability -Modified MITI Test (I)	11 % - Not readily - 28 days	-	-
4-tert-butylcyclohexyl acetate	OECD 301B Ready Biodegradability -CO_2 Evolution Test	75 % - Readily - 28 days	-	-
Nerol	OECD 301F Ready Biodegradability - Manometric Respirometry Test	86 % - Readily - 28 days	-	-
Pin-2(10)-ene	OECD 301D Ready Biodegradability -Closed Bottle Test	1 % - Not readily - 28 days	-	-

Allyl (3-methylbutoxy)acetate	OECD 301F Ready Biodegradability - Manometric Respirometry Test	74 % - Inherent - 32 days	-	-
Linalyl acetate	OECD 301F Ready Biodegradability - Manometric Respirometry Test	75 % - Readily - 28 days	-	
Citral	OECD 301C Ready Biodegradability -Modified MITI Test (I)	92 % - Readily - 28 days -	-	-
1,2,3,5,6,7-hexahydro-1,1,2,3,3-pentamethyl-4H-inden-4-one	OECD 301C Ready Biodegradability -Modified MITI Test (I)	0 % - Not readily - 28 days	-	-
Cineole	OECD 301F Ready Biodegradability - Manometric Respirometry Test	82 % - Readily - 28 days	-	-
(Z)-3-hexenyl salicylate	OECD 301F Ready Biodegradability - Manometric Respirometry Test	89 % - Readily - 28 days	-	-
Terpineol	OECD 301F Ready Biodegradability - Manometric Respiro	80 % - Readily - 28 days	-	-
Geranyl acetate	OECD 301F Ready Biodegradability - Manometric Respirometry Test	73 % - Readily - 28 days - -	-	-
Coumarin	OECD 301F Ready Biodegradability - Manometric Respirometry Test	90 % - Readily - 28 days	-	-

Product/ingredient nam	**Aquatic half-life**	**Photolysis**	**Biodegradability**
Nerol	-	-	Readily
Linalool	-	-	Readily
α-hexylcinnamaldehyde	-	-	Readily
2-tert-butylcyclohexyl acetate	-	-	Not readily
2-ethyl-4-(2,2,3-trimethyl-3-cyclopenten-1-yl)-2-buten-1-ol	-	-	Not readily
Benzyl salicylate	-	-	Readily
Geraniol	-	-	Readily

4-tert-butylcyclohexyl acetate	-	-	Readily
Coumarin	-	-	Readily
Pin-2(10)-ene	-	-	Not Readily
Methyl 2,4-dihydroxy-3,6-dimethylbenzoate	-	-	Readily
Linalyl acetate	-	-	Readily
Citral	-	-	Readily
1,2,3,5,6,7-hexahydro-1,1,2,3,3-pentamethyl-4H-inden-4-one	-	-	Not readily
(Z)-3-hexenyl salicylate	-	-	Readily
Terpineol	-	-	Readily
Geranyl acetate	-	-	Readily
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	-	-	Not readily

12.3 Bioaccumulative potential

Product/ingredient nam	LogPow	BCF	Potential
DL-borneol	2.69	-	Low
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	5.65	-	High
Coumarin	3.41	82.59	Low
Nerol	3.47	-	Low
Methyl 2,4-dihydroxy-3,6-dimethylbenzoate	2.6	-	Low
Linalyl acetate	3.9	173.9	Low
Citral	2.76	89.72	Low
1,2,3,5,6,7-hexahydro-1,1,2,3,3-pentamethyl-4H-inden-4-one	4.5	140	Low
Geraniol	2.6	-	Low
(Z)-3-hexenyl salicylate	4.8	-	High
Benzyl salicylate	4	311	Low
Terpineol	2.78	24.13	Low
Geranyl acetate	4.04	-	High
Pin-2(10)-ene	4.425	1163	High

4-tert-butylcyclohexyl acetate	4.8	334.6	Low
Linalool	2.84	-	Low
α-hexylcinnamaldehyde	5.3	6000	High
2-tert-butylcyclohexyl acetate	4.75	-	High
2-ethyl-4-(2,2,3-trimethyl-3-cyclopenten-1-yl)-2-buten-1-ol	4.4	667	High
Cineole	2.74	-	Low

12.4 Mobility in soil

Soil/water partition coefficient (KOC):Not available.

Mobility: Not available.

12.5 Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

12.6 Other adverse effects:No known significant effects or critical hazards.

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 minimized 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:

The classification of the product may meet the criteria for a hazardous waste.

European waste catalogue (EWC)

Waste code:16 03 05*

Waste designation:organic wastes containing hazardous substances

Packaging

Methods of disposal:

The generation of waste should be avoided or minimized 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 spilled material and runoff and contact with soil, waterways, drains and sewers.

14. TRANSPORT INFORMATION

49CFR Road 0 – 25 kg Not classified as dangerous in the meaning of transport regulations.

49CFR Road 25 – 400 kg Not classified as dangerous in the meaning of transport regulations.

49CFR Road > 400 kg Not classified as dangerous in the meaning of transport regulations.

ADR/RID IMDG IATA

UN number : 3082

Description of the goods : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,N.O.S.

p-menth-1-en-8-yl acetate;α-hexylcinnamaldehyde;2-tert-butylcyclohexyl acetate;2-ethyl-4-(2,2,3-trimethyl-3-cyclopenten-1-yl)-2-buten-1-ol

Transport hazard class(es) : 9

Packing group : III

Hazard Identification Number : 90

Labels : 9

Tunnel restriction code : (E)

Environmentally hazardous : yes

IATA/ICAO

UN number : 3082

Proper shipping name : Environmentally hazardous substance, liquid, n.o.s.

p-menth-1-en-8-yl acetate;α-hexylcinnamaldehyde;2-tert-butylcyclohexyl acetate;2-ethyl-4-(2,2,3-trimethyl-3-cyclopenten-1-yl)-2-buten-1-ol

Class : 9

Packing group : III

Labels : 9

Tunnel restriction code : (E)

Packing instruction (CAO) : 964

Packing instruction (PAX) : 964

Packing instruction (Ltd.Qty.) :Y964

IMDG

UN number : 3082

p-menth-1-en-8-yl acetate;α-hexylcinnamaldehyde;2-tert-butylcyclohexyl acetate;2-ethyl-4-(2,2,3-trimethyl-3-cyclopenten-1-yl)-2-buten-1-ol

Class : 9

Packing group : III

Labels : 9

EmS Fire : F-A

EmS Spillage : S-F

Marine pollutant : yes

p-menth-1-en-8-yl acetate;α-hexylcinnamaldehyde;2-tert-butylcyclohexyl acetate;2-ethyl-4-(2,2,3-trimethyl-3-cyclopenten-1-yl)-2-buten-1-ol

IMDG Code Segregation Group : None

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 authorization

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions:Not applicable.

on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Other EU regulations : No data available

Storage code: 10

Hazard class for water: 2

Technical instruction on airqualitycontrol:TA-Luft Number 5.2.5: 99.1%

TA-LuftClassI-Number5.2.5:0.4%

Registrationstatus

All components are listed

Australia inventory (AICS)

China inventory (IECSC

Philippines inventory (PICCS)

Taiwan Chemical Substances Inventory (TCSI)

United States inventory (TSCA 8b)

Europe inventory (EINECS/ELINCS/NLP)

Canada inventory: At least one component is not listed in DSL

but all such components are listed in NDSL.

This SDS is not a REACH compliance confirmation. Please order and refer to the official drom REACH Statement.

15.2 Chemical Safety Assessment

This product contains substances for which Chemical Safety Assessments are still required.

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 Commission Regulation (EU) 2020/878

Full text of abbreviated H statements

H330 Fatal if inhaled

H315 Causes skin irritation

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H332 Harmful if inhaled

H336 May cause drowsiness or dizziness.

H350 May cause cancer (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)

H304 May be fatal if swallowed and enters airways

H371 May cause damage to organs <or state all organs affected, if known> <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.

H400 Very toxic to aquatic life

H361 Suspected of damaging fertility or the unborn child <state specific effect if known> <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.

H302 Harmful if swallowed

H228 Flammable solid.

H410 Very toxic to aquatic life with long lasting effects.

H411 Toxic to aquatic life with long lasting effects

H226 Flammable liquid and vapour.

H412 Harmful to aquatic life with long lasting effects

Version No: 1.1

Revision Time:2025/11/21

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.