

**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY UNDERTAKING****1.1 Product identifier****Product name:** WHITE LOTUS**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

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1.4 Emergency telephone number

Chinese Center for Disease Control and Prevention(China CDC)

+86-10-58900240, 58900216**2. HAZARD IDENTIFICATION****2.1 Classification of the substance or mixture**

Product definition: Fragrances compounding

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

Skin Irrit. 2, H315

Skin Sens. 1B, H317

Eye Irrit. 2, H319

Aquatic Chronic 2, H411

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

- H315 - Causes skin irritation
- H317 - May cause an allergic skin reaction.
- H319 - Causes serious eye irritation.
- H411 - Toxic to aquatic life with long lasting effects

Precautionary statements

Prevention:

- P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.
- P264 - Clean skin thoroughly after operation.
- 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
- P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P321 - Specific treatment (see ... on this label).
- P332+P313 - If skin irritation occurs: Get medical advice/attention.
- P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
- P337+P313 - If eye irritation persists: Get medical advice/attention.
- P362+P364 - Take off contaminated clothing and wash it before reuse.
- P391 - Collect spillage. Hazardous to the aquatic environment

Storage :

None

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	CLASSIFICATION ACCORDING Reg. 1272/2008/CE
2-(2-ethoxyethoxy)ethanol	111-90-0	203-919-7	45-50	Not classified.
1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran	1222-05-5	214-946-9	10-15	Aquatic Acute 1, H400 Har. Classification Aquatic Chronic 1, H410 Har. Classification
4-methyl-2-(2-methylpropyl)oxan-4-ol	63500-71-0	613-238-0	8-9	Eye Irrit. 2, H319 Har. Classification
α -hexylcinnamaldehyde	101-86-0	202-983-3	5-6	Skin Sens. 1B, H317 Aquatic Acute 1, H400 Aquatic Chronic 2, H411
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	3-4	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	3-4	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	3-4	Skin Irrit. 2, H315 Skin Sens. 1B, H317 Aquatic Chronic 1, H410
linalool	78-70-6	201-134-4	3-4	Skin Irrit. 2, H315 Skin Sens. 1B, H317 Har. Classification Eye Irrit. 2, H319
2-phenylethanol	60-12-8	200-456-2	1-2	Acute Tox. 4, H302 Eye Irrit. 2, H319
3-methyl-4-(2,6,6-trimethyl-2-cyclohexen-1-yl)-3-buten-2-one	127-51-5	204-846-3	1-2	Skin Irrit. 2, H315 Skin Sens. 1B, H317 Eye Irrit. 2, H319 Aquatic Chronic 2, H411
citronellol	106-22-9	203-375-0	1-2	Skin Irrit. 2, H315 Skin Sens. 1B, H317 Eye Irrit. 2, H319
α,α -dimethylphenethyl acetate	151-05-3	205-781-3	1-2	Skin Irrit. 2, H315 Aquatic Chronic 3, H412
benzyl salicylate	118-58-1	204-262-9	1-2	Skin Sens. 1B, H317 Har. Classification Eye Irrit. 2, H319 Aquatic Chronic 3, H412
2-methyl-4-phenylbutan-2-ol	103-05-9	203-074-4	0.5-1	Eye Irrit. 2, H319 Aquatic Chronic 3, H412
2,4-dimethyl-4,4a,5,9b-tetrahydroindeno[1,2-d]-1,3-dioxin	27606-09-3	248-561-2	0.5-1	Acute Tox. 4, H302
3-methyl-5-phenylpentanol	55066-48-3	259-461-3	0.5-1	Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319
6,6-dimethoxy-2,5,5-trimethylhex-2-ene	67674-46-8	266-885-2	0.5-1	Skin Irrit. 2, H315 Aquatic Chronic 3, H412
2-ethyl-4-(2,2,3-trimethyl-3-cyclopenten-1-yl)-2-buten-1-ol	28219-61-6	248-908-8	0.5-1	Eye Irrit. 2, H319 Aquatic Chronic 1, H410
benzyl acetate	140-11-4	205-399-7	0.5-1	Aquatic Chronic 3, H412
α -methyl-1,3-benzodioxole-5-propionaldehyde	1205-17-0	214-881-6	0.5-1	Skin Sens. 1B, H317 Repr. 2, H361 Aquatic Chronic 2, H411
hexyl salicylate	6259-76-3	228-408-6	0.5-1	Skin Sens. 1B, H317 Aquatic Chronic 1, H410



2,2,2-trichloro-1-phenylethyl acetate	90-17-5	201-972-0	0.4-0.5	Aquatic Chronic 3, H412
β -methyl-3-(1-methylethyl)benzenepropanal	125109-85-5	412-050-4	0.1-0.2	Aquatic Chronic 2, H411(M=1) Har. Classification
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:**

Causes serious eye damage.

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**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

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 incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

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**

2-(2-ethoxyethoxy)ethanol

TRGS 900 OEL (Germany, 6/2017).
TWA: 35 mg/m³ 8 hours.
PEAK: 70 mg/m³ 15 minutes.
TWA: 6 ppm 8 hours.
PEAK: 12 ppm 15 minutes.
DFG MAC-values list (Germany, 7/2015).
PEAK: 100 mg/m³, 4 times per shift, 15 minutes. Form:
inhalable
fraction
T

DNELs/DMELs

Product/ingredient name	Type	Exposure	Value	Population	Effects
Tetrahydro-4-methyl-2-(2-methylprop-1-enyl)pyran	DNEL	Long term Dermal	0.3 mg/kg	Workers	Systemic
	DNEL	Long term Inhalation	1.2 mg/m ³	Workers	Systemic
	DNEL	Long term Inhalation	0.3 mg/m ³	General population [Consumers]	Systemic
	DNEL	Long term Dermal	0.2 mg/kg	General population [Consumers]	Systemic
	DNEL	Long term Oral	0.2 mg/kg	General population [Consumers]	Systemic
Vanillin	DNEL	Short term Oral	10 mg/kg bw/day	General population Consumers	Systemic
2,6-dimethyloct-7-en-2-ol	DNEL	Long term Inhalation	73.5 mg/m ³	Workers	Systemic
	DNEL	Long term Inhalation	21.7 mg/m ³	General population	Systemic
	DNEL	Long term Dermal	20.8 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Dermal	12.5 mg/kg bw/day	General population	Systemic
	DNEL	Long term Oral	12.5 mg/kg bw/day	General population	Systemic
Hexyl salicylate	DNEL	Long term Inhalation	0.729 mg/m ³	Workers	Systemic
	DNEL	Long term Dermal	2083 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	0.219 mg/m ³	Consumers	Systemic
	DNEL	Long term Dermal	1250 mg/kg bw/day	Consumers	Systemic
α-methyl-1,3-benzodioxole-5-propionaldehyde	DNEL	Long term Inhalation	1.2 mg/m ³	Workers	Systemic
	DNEL	Long term Dermal	0.17 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Dermal	0.01 mg/m ³	Workers	Local
	DNEL	Long term Inhalation	0.29 mg/m ³	General population [Consumers]	Systemic
	DNEL	Long term Dermal	0.083 mg/kg bw/day	General population [Consumers]	Systemic
	DNEL	Long term Dermal	0.005 mg/m ³	General population [Consumers]	Loc
	DNEL	Long term Oral	0.017 mg/kg bw/day	General population [Consume	
Benzyl acetate	DNEL	Short term Oral	6.25 mg/kg bw/day	Consumers	Systemic
	DNEL	Long term Oral	3.125 mg/kg bw/day	Consumers	Systemic
	DNEL	Short term Dermal	6.25 mg/kg bw/day	Consumers	Systemic
	DNEL	Long term Dermal	3.125 mg/kg bw/day	Consumers	Systemic
	DNEL	Short term Inhalation	11 mg/m ³	Consumers	Systemic
	DNEL	Long term Inhalation	5.5 mg/m ³	Consumers	
	DNEL	Short term Dermal	12.5 mg/kg bw/day	Workers	
	DNEL	Long term Dermal	6.25 mg/kg bw/day	Workers	
	DNEL	Short term Inhalation	43.8 mg/m ³	Workers	
	DNEL	Long term Inhalation	2	Workers	
	DNEL				



6,6-dimethoxy-2,5,5-trimethylhex-2-ene	DNEL	Long term Inhalation	14.5 mg/m ³	Workers	Systemic
	DNEL	Short term Inhalation	43.4 mg/m ³	Workers	Systemic
	DNEL	Long term Inhalation	36.1 mg/m ³	Workers	Local
	DNEL	Short term Inhalation	108.4 mg/m ³	Workers	Local
	DNEL	Long term Dermal	4.1mg/kg	Workers	Systemic
	DNEL	Short term Dermal	12.3 mg/kg	Workers	System
	DNEL	Long term Dermal	10.3 mg/cm ²	Workers	
	DNEL	Short term Oral	6.2 mg/kg	Workers	
	DNEL	Long term Inhalation	3.6 mg/m ³	General population	
	DNEL	Short term Inhalation	10.7 mg/m ³	General population	
	DNEL	Long term Inhalation	8.9 mg/m ³	General population	
	DNEL	Short term Inhalation	26.7 mg/m ³	General population	
	DNEL	Lon	2.1 mg		
	DNEL				
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/m ³	Workers	Systemic
	DNEL	Long term Inhalation	5.2 mg/m ³	General population [Consumers]	Systemic
	DNEL	Long term Dermal	3 mg/kg bw/day	General population [Consumers]	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/m ³	Consumers	Systemic
		Long term Dermal	0.9 mg/kg bw/day	Workers	Systemic
		Long term Inhalation	3.17 mg/m ³	Workers	Systemi
Citronellol	DNEL	Long term Inhalation	161.6 mg/m ³	Workers	Systemic
		Long term Dermal	327.4 mg/kg	Workers	Systemic
		Short term Dermal	2.95 mg/cm ²	Workers	Local
		Long term Inhalation	47.8 mg/m ³	Consumers	Systemic
		Long term Dermal	196.4 mg/kg	Consumers	Systemic
		Long term Oral	13.8 mg/kg	Consumers	Sys
		Short term Dermal	2.95 mg/cm ²	Workers	
		Long term Inhalation	10mg/m ³	Consumers	
2-phenylethanol	DNEL	Long term Oral	5.1 mg/kg bw/day	Consumers	Systemic
		Long term Dermal	12.7 mg/kg bw/day	Consumers	Systemic
		Long term Inhalation	17.7 mg/m ³	Consumers	Systemic
		Long term Dermal	21.2 mg/kg bw/day	Workers	Systemic
		Long term Inhalation	59.9 mg/m ³	Workers	Systemic
Linalool	DNEL	Short term Inhalation	16.5 mg/m ³	Workers	Systemic
		Short term Dermal	5 mg/kg bw/day	Consumers	Systemic
		Long term Dermal	15 mg/cm ²	Consumers	Local
		Short term Oral	1.2 mg/kg bw/day	Consumers	Systemic
		Short term Inhalation	4.1 mg/m ³	Consumers	Systemic
		Short term Dermal	2.5 mg/cm ²	Consumers	Sys
		Short term Dermal	15 mg/cm ²	Consumers	
		Long term Oral	0.2 mg/kg bw/day	Consumers	
		Long term Inhalation	0.7 mg/m ³	Consumers	
		Long term Dermal	1.25 mg/ kg bw/day	Consumers	
		Short term Dermal	15 mg/cm ²	Workers	
		Long term Dermal		Workers	
		Long term Inhalation		Workers	
				Workers	



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/cm ²	Consumers	Local
	DNEL	Long term Dermal	9 mg/kg bw/day	Consumers	Systemic
	DNEL	Short term Inhalation	4.7 mg/m ³	Consumers	Local
	DNEL	Long term Inhalation	0.019 mg/m ³	Consumers	Systemic
	DNEL	Long term Dermal	0.525 mg/cm ²	Workers	
	DNEL	Long term Inhalation	0.078 mg/m ³	Workers	
	DNEL	Long term Dermal	18.2 mg/kg bw/day	Workers	
	DNEL	Short term Inhalation	6.28 mg/m ³	Workers	
	DNEL	Short term Dermal		Workers	
4-methyl-2-(2-methylpropyl)oxan-4-ol	DNEL	Long term Oral	1 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	1.8 mg/m ³	General population	Systemic
	DNEL	Long term Dermal	2.4 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	3.9 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	6.1 mg/m ³	Workers	Systemic
1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran	DNEL	Long term Oral	0.75 mg/kg bw/day	Consumers	Systemic
	DNEL	Long term Dermal	14.43 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	1.3 mg/m ³	Consumers	Systemic
	DNEL	Long term Inhalation	5.29 mg/m ³	Workers	Systemic
	DNEL	Long term Dermal	28.85 mg/kg bw/day	Workers	Local

PNECs

Product/ingredient name	Compartment Detail	Value	Method Detail
Benzyl salicylate	Fresh water	0.00103 mg/l	-
	Secondary Poisoning	80 mg/kg	-
	Soil	0.021 mg/kg	-
	Sewage Treatment Plant	10 mg/l	-
	Marine water sediment	0.0584 mg/kg	-
	Fresh water sediment	0.000103 mg/l	-
	Marine water	0.0103 mg/l	-
	Intermittent release	0.584 mg/kg	-
	Marine water	0.584 mg/kg	-
	Fresh water	0.00103 mg/l	-
	Intermittent release	0.0103 mg/l	-
	Secondary Poisoning	80 mg/kg	-
Citronellol	Fresh water	2.4 µg/L	-
	Intermittent releases (freshwater)	24 µg/L	-
	Marine water	240 ng/L	-
	Sewage Treatment Plant	580 mg/l	-
	Fresh water sediment	25.6 µg/kg	-
	Marine water sediment	2.56 µg/kg	-
	Soil	3.71 µg/kg	-
2-phenylethanol	Soil	0.164 mg/kg	-
	Marine water sediment	0.1454 mg/kg	-
	Fresh water sediment	1.454 mg/kg	-
	Sewage Treatment Plant	10 mg/l	-
	Intermittent release	2.15 mg/l	-
	Marine water	0.0215 mg/l	-
	Fresh water	0.215 mg/l	-
Linalool	Fresh water	200 µg/L	-
	Intermittent releases (freshwater)	2 mg/l	-
	Marine water	20 µg/L	-
	Sewage Treatment Plant	10 mg/l	-
	Fresh water sediment	2.22 mg/kg	-
	Marine water sediment	222 µg/kg	-
	Soil	327 µg/kg	-
	Secondary poisoning	7.8 mg/kg food	-



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 Assessment Factors Equilibrium Partitioning Assessment Factors -
4-methyl-2-(2-methylpropyl)oxan-4-ol	Fresh water Fresh water sediment Marine water Marine water sediment Intermittent release Sewage Treatment Plant Soil	0.094 mg/l 0.412 mg/kg dwt 0.0094 mg/l 0.0412 mg/kg dwt 0.94 mg/l 10 mg/l 0.0902 mg/kg dwt	- - - - - - -
1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran	Sewage Treatment Plant Soil Marine water sediment Fresh water sediment Marine water Fresh water	1 mg/l 0.31 mg/kg 0.394 mg/kg 2 mg/kg 0.00044 mg/l 0.0044 mg/l	- - - - - -
Tetrahydro-4-methyl-2-(2-methylprop-1-enyl)pyran	Fresh water Marine water Intermittent release Sewage Treatment Plant Fresh water sediment Marine water sediment Soil	0.0332 mg/l 0.00332 mg/l 0.332 mg/l 10 mg/l 2.29 mg/kg 0.229 mg/kg 0.437 mg/kg	- - - - - - -
Vanillin	Fresh water Marine water Fresh water sediment Marine water sediment Soil Sewage Treatment Plant	0.118 mg/l 0.0118 mg/l 58.22 mg/kg 5.8.2 mg/kg 11.54 mg/kg 10 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



2,6-dimethyloct-7-en-2-ol	Fresh water	0.278 mg/l	-
	Marine water	0.278 mg/l	-
	Soil	0.103 mg/kg	-
	Fresh water sediment	0.594 mg/kg	-
	Marine water sediment	0.0594 mg/kg	-
Hexyl salicylate	Fresh water	0.000357 mg/l	-
	Marine water	0.0000357 mg/l	-
	Fresh water sediment	0.059 mg/kg	-
	Marine water sediment	0.0059 mg/kg	-
	Soil	0.0542 mg/kg	-
α -methyl-1,3-benzodioxole-5-propionaldehyde	Fresh water	0.005 mg/l	-
	Marine water	0.001 mg/l	-
	Sewage Treatment Plant	10 mg/l	-
	Fresh water sediment	0.057 mg/kg	-
	Marine water sediment	0.006 mg/kg	-
	Soil	0.008 mg/kg	-
Benzyl acetate	Soil	0.0205 mg/kg	-
	Marine water sediment	0.0114 mg/kg	-
	Fresh water sediment	0.114 mg/kg	-
	Sewage Treatment Plant	8.55 mg/l	-
	Intermittent release	0.04 mg/l	-
	Marine water	0.0004 mg/l	-
	Fresh water	0.004 mg/l	-
2-ethyl-4-(2,2,3-trimethyl-3-cyclopenten-1-yl)-2-buten-1-ol	Fresh water	8.8 μ g/l	-
	Marine water	0.88 μ g/l	-
	Fresh water sediment	1.05 mg/kg dwt	-
	Marine water sediment	0.105 mg/kg ww	-
	Soil	0.206 mg/kg	-
	Sewage Treatment Plant	1 mg/l	-

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:	Consistent to the standard sample
Gravity Density:	0.964~0.984(25/25°C)
Refractive index:	1.4565~1.4765(20°C)
Solubility in water:	Unsoluble
Flash point:	107°C
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
Citronellol	LD50 Rabbit Dermal 2650 mg/kg LD50 Rat Oral 3450 mg/kg	-
Hexyl salicylate	LD50 Dermal Rabbit >5 g/kg LD50 Oral Rat >5 g/kg	-
α-methyl-1,3-benzodioxole-5-propionaldehyde	LD50 Dermal Rabbit >2000 mg/kg LD50 Oral Rat 3600 mg/kg	-
Benzyl acetate	LD50 Rat oral 2490 mg/kg LD50 Oral mouse 830 mg/kg LCLo Inhalation mouse 1300 mg/m ³ /22H LC50 Inhalation Mammal - cat 245 ppm/8H LDLo Cat administration onto the skin 10mg/kg LD50 Oral rabbit 2200 mg/kg LD50 Rabbit administration onto the skin >5 mg/	-
6,6-dimethoxy-2,5,5-trimethylhex-2-ene	LD50 Dermal Rat >2000 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	-
3-methyl-5-phenylpentanol	LC50:Danio rerio - 13.3 mg/L - 96 h EC50:Daphnia magna - 13 mg/L - 48 h EC50:Pseudokirchneriella subcapitata 16mg/L 72h	-
1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran	LD50 Rat oral >5000 mg/kg	-
α,α -dimethylphenethyl acetate	LD50:Rat oral 3300mg/kg	-
Undecan-4-olide	LD50 Rat oral 18,500 mg/kg LC50:Rainbow trout 569mg/L-96h EC50:Water flea 17.0 mg/L-48h	-
3-methyl-4-(2,6,6-trimethyl-2-cyclohexen-1-yl)-3-buten-2-one	LD50:Rabbit Dermal >5000 mg/kg LD50:Rat Oral >5000 mg/kg	-
2-phenylethanol	LD50 Rat oral 1700mg/kg LD50:Rabbit Dermal 2535 mg/kg LD50:Rat Oral 1609 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	-
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	-
α -hexylcinnamaldehyde	LD50 Rat oral 3100mg/KG LC50 Rat Inhalation Dusts and mists >2100 mg/m ³ 8 Hours LD50 Rabbit Dermal 3000 mg/kg LD50 Rat Oral 3100 mg/kg	-
4-methyl-2-(2-methylpropyl)oxan-4-ol	LD50:Rabbit Dermal >2000 mg/kg LD:Rat Oral >5000 mg/kg	-
Benzyl salicylate	LD50 Oral Rat 2227 mg/kg LD50 Dermal Rabbit 14150 mg/kg	-
1-phenylethyl acetate	LD50 Rat oral >5000 mg/kg LD50 Dermal rabbit >5000 mg/kg	-
Allyl heptanoate	LD50 Rabbit Dermal 810 mg/kg LD50 Rat Oral 218 mg/kg	-
Linalyl acetate	LD50 Rat oral 13934 mg/kg LD50 Rabbit Dermal >5000 mg/kg	-
Allyl (3-methylbutoxy)acetate	LD50 Rat Oral 730 mg/kg	-
7-methyl-2H-benzo-1,5-dioxepin-3(4H)-one	LC50:Danio rerio > 100 mg/L - 96 h EC50:Daphnia magna - > 96.2 mg/L - 48h EC50:Pseudokirchneriella subcapitata > 100mg/L 72h NOEC:activated sludge, domestic - > 100 mg/L 32d	-
2,4-dimethylcyclohex-3-ene-1-carbaldehyde	LD50:Rabbit Dermal >5000 mg/kg LD50:Rat Oral 3900 mg/kg	-
Tetrahydro-4-methyl-2-(2-methylprop-1-enyl)pyran	LD50:Rat Dermal >5000 mg/kg LD50:Rat Oral 4300 mg/kg	-
2,6-dimethyloct-7-en-2-ol	LD50 Rat oral 3600 mg/kg LD50:Dermal rabbit >5 gm/kg	-



Methyl anthranilate	LD50:Rabbit Dermal >5 g/kg LD50:Rat Oral 2910 mg/kg	-
4-methyl-3-decen-5-ol	LD50 Oral Rat 8000 mg/kg	
Vanillin	LD50 Rat oral 1580 mg/kgLC Rabbit inhalation >41700 ug/kg/4HLD Rat administration onto skin >2 gm/kgLD50 Rat intraperitoneal 1160 mg/kgLD50 Rat subcutaneous 1500 mg/kgLD50 Mouse oral 3925 mg/kgLC Mouse inhalation >41700 ug/kg/2H	-
Decanal	LD50 Rat oral 3730 uL/kg LD50 mouse oral >41750 mg/kg LD50 Dermal rabbit 5040 U/kg	-
2-tert-butylcyclohexyl acetate	LD50 Rat oral 4,600 mg/kg LD50 Dermal rabbit 5,000 mg/kg	-
cis-hex-3-en-1-ol	LD50 Rat oral 4700mg/KG LD50:Rabbit Dermal > 5000mg/KG	-
Methyl 2,4-dihydroxy-3,6-dimethylbenzoate	LD50:Rabbit Dermal >5000 mg/kg LD50:Rat Oral >8000 mg/kg	-
Nerol	LD50:Rabbit Dermal > 5000mg/kg LD50:Rat Oral > 4500mg/kg	-
3-ethoxy-4-hydroxybenzaldehyde	LD50 Rat oral 1590mg/KGLD50:Rabbit dermal 7940mg/kg	-
Pentyl salicylate	LD50:Dermal Rabbit >5000 mg/kg LD50:Oral Rat 4100 mg/kg	-

Acute toxicity estimates

No data available

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
2-ethyl-4-(2,2,3-trimethyl-3-cyclopenten-1-yl)-2-buten-1-ol	Eyes - Irritant	Mammal - species unspecified	-	-	-
Citronellol	Eyes - Moderate irritant	Rabbit	-	0.42%	-
	Skin - Severe irritant	Guinea pig	-	24 hours 100mg	-
	Skin - Moderate irritant	Man	-	8 hours 16mg	-
	Skin - Moderate irritant	Rabbit	-	4 hours 0.42%	-
	Skin - Severe irritant	Rabbit	-		-
2-phenylethanol	Eyes - Mild irritant	Rabbit	-	10 minutes 12 g	-
	Eyes - Severe irritant	Rabbit	-	24 hours 750 mg	-
Linalool	Eyes - Moderate irritant	Rabbit	-	1 hours 0.1 ml	-
	Eyes - Moderate irritant	Rabbit	-	100 microliters	-
	Skin - Moderate irritant	Guinea pig	-	24 hours 100 mg	-
	Skin - Mild irritant	Human	-	72 hours 32%	-
	Skin - Mild irritant	Man	-	48 hours 16 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Severe irritant	Rabbit	-	24 hours 100 mg	-
α -hexylcinnamaldehyde	Skin - Erythema/Eschar	Rabbit	2	-	-
	Eyes - Redness of the conjunctivae	Rabbit	0.33	-	-
Allyl heptanoate	Eyes - Mild irritant	Rabbit	-	-	-



Linalyl acetate	Skin - Moderate irritant	Guinea pig	-	24 hours 100 mg	-
	Skin - Severe irritant	Rabbit	-	24 hours 100 mg	-
Allyl (3-methylbutoxy)acetate	Skin - Mild irritant	Rabbit	-	-	-
Nerol	Eyes - Moderate irritant	Rabbit	-	0.1 Milliliters	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500mg	-
2,6-dimethyloct-7-en-2-ol	Eyes - Mild irritant	Rabbit	-	7.5%	-
	Skin - Mild irritant	Rabbit	-	4 hours 0.5 MI	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 mg	-

Sensitization			
Product/ingredient na	Route of exposure	Species	Result
Methyl 2,4-dihydroxy-3,6-dimethylbenzoate	skin	Mouse	Sensitizing
α-methyl-1,3-benzodioxole-5-propionaldehyde	skin	Mouse	Sensitizing
2-ethyl-4-(2,2,3-trimethyl-3-cyclopenten-1-yl)-2-buten-1-ol	skin	Guinea pig	Not sensitizing
Citronellol	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
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	Negative
		Experiment: In vitro Subject: Mammalian-Human	Negative
α-hexylcinnamaldehyde	OECD 474 Mammalian Erythrocyte Micronucleus Test	Experiment: In vivo Subject: Mammalian-Animal	Negative
	OECD 471 Bacterial Reverse Mutation Test	Experiment: In vitro Subject: Bacteria	Negative

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
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2,6-dimethyloct-7-en-2-ol	Acute EC50 3.88 mg/l Acute LC50 5.7 mg/l Acute LC50 4.81 mg/l	Algae Daphnia Fish	96 hours 48 hours 96 hours
4-methyl-2-(2-methylpropyl)oxan-4-ol	Acute EC50 320 mg/l Acute EC50 1000 mg/l Acute LC50 354 mg/l	Daphnia Micro-organism Fish	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
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
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
2-phenylethanol	Acute EC50 287 mg/l Acute LC50 460 mg/l	Daphnia Fish	48 Hours 96 Hours
3-methyl-4-(2,6,6-trimethyl-2-cyclohexen-1-yl)-3-buten-2-one	Acute EC50 2.65 mg/l	Daphnia	48 hours
Citronellol	Acute EC10 580 mg/l Acute EC50 2.4 mg/l Acute EC50 17.48 mg/l Acute LC50 14.66 mg/l	Micro-organism Aquatic plants Daphnia Fish	30 Minutes 72 Hours 48 Hours 96 Hours
α,α -dimethylphenethyl acetate	Acute EC50 21.3 mg/l	Daphnia	48 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
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
6,6-dimethoxy-2,5,5-trimethylhex-2-ene	Acute EC50 50.7 mg/l	Daphnia	48 hours
Benzyl acetate	Acute EC50 17 mg/l Acute EC50 855 mg/l Acute IC50 114 mg/l Chronic NOEC 52 mg/l	Daphnia Micro-organism Algae Algae	48 hours 3 hours 72 hours 72 hours



1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran	Acute EC50 0.9 mg/l Acute LC50 0.452 mg/l Chronic NOEC 0.111 mg/l Chronic NOEC 0.068 mg/l	Daphnia Fish Daphnia Fish	48 hours 21 days 21 days 36 days
Hexyl salicylate	Acute EC50 0.357 mg/l Acute LC50 0.61 mg/l Acute LC50 1.34 mg/l	Daphnia Algae Fish	48 hours 72 hours 96 hours
Linalyl acetate	Acute EC50 15 mg/l Acute LC50 11 mg/l	Daphnia Fish	48 Hours 96 Hours
4-methyl-3-decen-5-ol	Acute EC50 0.4 mg/l Acute LC50 3 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
Methyl 2,4-dihydroxy-3,6-dimethylbenzoate	Acute EC50 1.8 mg/l	Daphnia	48 hours
cis-hex-3-en-1-ol	Acute LC50 381000 µg/l Fresh water	Fish - Pimephales promelas - Juvenile	96 hours
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
Decanal	Acute EC50 4.5 mg/l Acute EC50 1.17 mg/l Acute LC50 1.45 mg/l	Algae Daphnia Fish	72 hours 48 hours 96 hours
Vanillin	Acute ECSO 36.8 mg/l Acute LC50 57000µg/l Fresh water Acute NOEC 47 mg/l Acute NOEC 5.9 mg/l	Daphnia Fis Pimephales promelas Aquatic plants Daphnia	48 hours 96 hours 72 hours
Methyl anthranilate	Acute EC50 18.2 ppm Fresh water Acute LC50 9120 µg/l Fresh water	Daphnia - Daphnia magna Fish - Lepomis acrochirus -Fry	48 Hours 96 Hours
Pentyl salicylate	Acute LC50 1.34 mg/l	Fish	96 hours
Tetrahydro-4-methyl-2-(2-methylprop-1-enyl)pyran	Acute EC50 79.7 mg/l Acute EC50 33.2 mg/l Acute LC50 77.6 mg/l	Algae Daphnia Fish	72 hours 48 hours 96 hours
2,4-dimethylcyclohex-3-ene-1-carbaldehyde	Acute EC50 22.4 mg/l	Daphnia	48 hours
Anisaldehyde	Acutely not harmful to fish.	Fresh water fish	96 hours
α-methyl-1,3-benzodioxole-5-propionaldehyde	Acute EC50 8.3 mg/l	Daphnia	48 hours

12.2 Persistence and degradabilit

Product/ingredient nam	Test	Result	Dose	Inoculum
α-methyl-1,3-benzodioxole-5-propionaldehyde	OECD 301B Ready Biodegradability -CO2 Evolution Test	29 % - Not readily - 28 days	-	-



4-methyl-2-(2-methylpropyl)oxan-4-ol	OECD 301C Ready Biodegradability -Modified MITI Test (I)	<60 % - Not readily - 28 days	-	-
α -hexylcinnamaldehyde	OECD 301F Ready Biodegradability - Manometric Respirometry Test	97 % - 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	-	-
Linalool	OECD 301D Ready Biodegradability - Closed Bottle Test	64% (BOD) in 28 days	-	-
2-phenylethanol	OECD 301B Ready Biodegradability -CO ₂ Evolution Test	79 % - Readily - 28 days	-	-
3-methyl-4-(2,6,6-trimethyl-2-cyclohexen-1-yl)-3-buten-2-one	-	77 % - Readily - 28 days	-	-
Citronellol	OECD 301B Ready Biodegradability -CO ₂ Evolution Test	80-90 % - Readily - 28 days		
Citronellol	OECD 301F Ready Biodegradability - Manometric Respirometry Test	90 % - Readily - 28 days	-	-
α,α -dimethylphenethyl acetate	OECD 301F Ready Biodegradability - Manometric Respirometry Test	79 % - Readily - 28 days	-	-
Benzyl salicylate	OECD 301F Ready Biodegradability - Manometric Respirometry Test	93 % - Readily - 28 days	-	-
6,6-dimethoxy-2,5,5-trimethylhex-2-ene	OECD 301D Ready Biodegradability -Closed Bottle Test	<60 % - Not readily - 28 days		
1,3,4,6,7,8-hexahydro-4,6,6,7,8-hexamethylindeno[5,6-c]pyran	OECD 301F Ready Biodegradability - Manometric Respirometry Test	2 % - Not readily - 28 days	-	-
Benzyl acetate	OECD 301B Ready Biodegradability -CO ₂ Evolution Test	92 % - Readily - 28 days	-	-
Allyl (3-methylbutoxy)acetate	OECD 301F Ready Biodegradability - Manometric Respirometry Test	74 % - Inherent - 32 days	-	-



Hexyl salicylate	OECD 301F Ready Biodegradability - Manometric Respirometry Test	91 % - Readily - 28 days	-	-
2,6-dimethyloct-7-en-2-ol	OECD 301B Ready Biodegradability -CO2 Evolution Test	72 % - Readily - 28 days	-	-
4-methyl-3-decen-5-ol	OECD 301F Ready Biodegradability - Manometric Respirometry Test	73 % - Readily - 28 days	-	-
Nerol	OECD 301F Ready Biodegradability - Manometric Respirometry Test	86 % - Readily - 28 days	-	-
Methyl 2,4-dihydroxy-3,6-dimethylbenzoate	OECD 301F Ready Biodegradability - Manometric Respirometry Test	63 % - Readily - 28 days	-	-
2-tert-butylcyclohexyl acetate	OECD 301F Ready Biodegradability - Manometric Respirometry Test	43 % - Not readily - 28 days	-	-
Decanal	OECD 301F Ready Biodegradability - Manometric Respirometry Test	82 % - Readily - 28 days		
Vanillin	OECD 301F Ready Biodegradability - Manometric Respirometry Test	>60 % - Readily - 28 days	-	-
Methyl anthranilate	OECD 301F Ready Biodegradability - Manometric Respirometry Test	85 % - Readily - 28 days	Activated sludge	
Pentyl salicylate	OECD 301D Ready Biodegradability -Closed Bottle Test	84 % - Readily - 28 days	-	-
Tetrahydro-4-methyl-2-(2-methylprop-1-enyl)pyran	OECD 301F Ready Biodegradability - Manometric Respirometry Test	79 % - Readily - 28 days		
Linalyl acetate	OECD 301F Ready Biodegradability - Manometric Respirometry Test	75 % - 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		



Product/ingredient nam	Aquatic half-life	Photolysis	Biodegradability
Methyl anthranilate	-	-	Readily
6,6-dimethoxy-2,5,5-trimethylhex-2-ene	-	-	Not readily
2-ethyl-4-(2,2,3-trimethyl-3-cyclopenten-1-yl)-2-buten-1-ol	-	-	Not readily
Benzyl acetate	-	-	Readily
α -methyl-1,3-benzodioxole-5-propionaldehyde	-	-	Not readily
Hexyl salicylate	-	-	Readily
2,6-dimethyloct-7-en-2-ol	-	-	Readily
4-methyl-3-decen-5-ol	-	-	Readily
Nerol	-	-	Readily
Methyl 2,4-dihydroxy-3,6-dimethylbenzoate	-	-	Readily
2-tert-butylcyclohexyl acetate	-	-	Not readily
Benzyl salicylate	-	-	Readily
Vanillin	-	-	Readily
α,α -dimethylphenethyl acetate	-	-	Readily
Tetrahydro-4-methyl-2-(2-methylprop-1-enyl)pyran	-	-	Readily
Linalyl acetate	-	-	Readily
1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran	-	-	Not readily
4-methyl-2-(2-methylpropyl)oxan-4-ol	-	-	Not readily
α -hexylcinnamaldehyde	-	-	Readily
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	-	-	Not readily
Linalool	-	-	Readily
2-phenylethanol	-	-	Readily
3-methyl-4-(2,6,6-trimethyl-2-cyclohexen-1-yl)-3-buten-2-one	-	-	Readily



Citronellol	-	-	Readily
Decanal	-	-	Readily

12.3 Bioaccumulative potential

Product/ingredient nam	LogPow	BCF	Potential
Hexyl salicylate	5.5	8913	High
4-methyl-2-(2-methylpropyl)oxan-4-ol	3.48	-	Low
α -hexylcinnamaldehyde	5.3	6000	High
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	5.65	-	High
Linalool	2.84	-	Low
2-phenylethanol	1.36	-	Low
Citronellol	3.41	82.59	Low
α,α -dimethylphenethyl acetate	3.4	-	Low
Benzyl salicylate	4	311	Low
2-ethyl-4-(2,2,3-trimethyl-3-cyclopenten-1-yl)-2-buten-1-ol	4.4	667	High
6,6-dimethoxy-2,5,5-trimethylhex-2-ene	3.8	-	Low
1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran	5.3	2507	High
α -methyl-1,3-benzodioxole-5-propionaldehyde	1.368	-	Low
Linalyl acetate	3.9	173.9	Low
2,6-dimethyloct-7-en-2-ol	3.25	64.8	Low
4-methyl-3-decen-5-ol	3.9	-	Low
Nerol	3.47	-	Low
Methyl 2,4-dihydroxy-3,6-dimethylbenzoate	2.6	-	Low
2-tert-butylcyclohexyl acetate	4.75	-	High
Decanal	3.8	-	Low
Vanillin	1.21	-	Low
Methyl anthranilate	1.88	-	Low



Pentyl salicylate	-	-	Readily
Tetrahydro-4-methyl-2-(2-methylprop-1-enyl)pyran	3.3	-	Low
Benzyl acetate	1.49	8	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.

1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran;α-hexylcinnamaldehyde;1-(1,2,3,5,6,7,8,8a-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one;1-(1,2,3,4,6,7,8,8a-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one

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.

1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran;α-hexylcinnamaldehyde;1-(1,2,3,5,6,7,8,8a-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one;1-(1,2,3,4,6,7,8,8a-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one

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

1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran;α-hexylcinnamaldehyde;1-(1,2,3,5,6,7,8,8a-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one;1-(1,2,3,4,6,7,8,8a-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one

Class : 9

Packing group : III

Labels : 9

EmS Fire : F-A

EmS Spillage : S-F



Marine pollutant : yes

1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran; α -hexylcinnamaldehyde;1-(1,2,3,5,6,7,8,8a-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one;1-(1,2,3,4,6,7,8,8a-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one

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 Regulation (EC) No. 1272/2008 [CLP/GHS]

Full text of abbreviated H statements

H400 Very toxic to aquatic life

H315 Causes skin irritation

H314 Causes severe skin burns and eye damage

H302 Harmful if swallowed

H226 Flammable liquid and vapour.

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>.

H317 May cause an allergic skin reaction.

H410 Very toxic to aquatic life with long lasting effects.

H411 Toxic to aquatic life with long lasting effects

H336 May cause drowsiness or dizziness.

H319 Causes serious eye irritation.

H318 Causes serious eye damage.

H330 Fatal if inhaled

H412 Harmful to aquatic life with long lasting effects

Version No: 1.1

Revision Time:2025-5-15

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.