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

Fragrance. Restricted to professional users. Industrial use only.

Not for personal use in this form or concentration.

1.3 Details of the supplier of the SDS

Supplier

SHANGHAI HERYNN FRAGRANCES & FLAVOURS CO., LTD.

Floor1-3, 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

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. 2/2A, 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.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.

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 :

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 : Not applicable

3.2 Mixtures :Fragrances compounding

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

Products/ingredient Name	Identifiers	Conc.%	Regulation(EC)No.1272/2008 [CLP]
2-(2-ethoxyethoxy)ethanol	Cas No:111-90-0 EC:203-919-7	45-50	Not classified.
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-	Cas No:54464-57-2 EC:259-174-3	10-15	Skin Irrit. 2,H315 Skin Sens. 1B,H317 Aquatic Chronic 1,H410

1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran	Cas No:1222-05-5 EC:214-946-9	10-15	Aquatic Acute 1, H400 Har. Classification Aquatic Chronic 1, H410 Har. Classification
a mixture of: cis-tetrahydro-2-isobutyl-4-methylpyran-4-ol;	Cas No:63500-71-0 EC:405-040-6	5-6	Eye Irrit. 2,H319
α-hexylcinnamaldehyde	Cas No:101-86-0 EC:202-983-3	5-6	Skin Sens. 1B,H317 Aquatic Acute 1,H400 Aquatic Chronic 2,H411
linalool	Cas No:78-70-6 EC:201-134-4	3-4	Skin Irrit. 2,H315 Skin Sens. 1B,H317 Har. Classification Eye Irrit. 2,H319
2-phenylethanol	Cas No:60-12-8 EC: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	Cas No:127-51-5 EC:204-846-3	1-2	Skin Irrit. 2,H315 Skin Sens. 1B,H317 Eye Irrit. 2,H319
citronellol	Cas No:106-22-9 EC:203-375-0	1-2	Skin Irrit. 2,H315 Skin Sens. 1B,H317 Eye Irrit. 2,H319
α,α-dimethylphenethyl acetate	Cas No:151-05-3 EC:205-781-3	1-2	Skin Irrit. 2,H315 Aquatic Chronic 3,H412
benzyl salicylate	Cas No:118-58-1 EC:204-262-9	1-2	Skin Sens. 1B, H317 Eye Irrit. 2,H319 Aquatic Chronic 3,H412
2-methyl-4-phenylbutan-2-ol	Cas No:103-05-9 EC: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-	Cas No:27606-09-3 EC:248-561-2	0.5-1	Acute Tox. 4,H302
3-methyl-5-phenylpentanol	Cas No:55066-48-3 EC:259-461-3	0.5-1	Acute Tox. 4,H302 STOT RE 2,H373
6,6-dimethoxy-2,5,5-trimethylhex-2-ene	Cas No:67674-46-8 EC: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	Cas No:28219-61-6 EC:248-908-8	0.5-1	Eye Irrit. 2,H319 Aquatic Chronic 1,H410
benzyl acetate	Cas No:140-11-4 EC:205-399-7	0.5-1	Aquatic Chronic 3,H412
α-methyl-1,3-benzodioxole-5-propionaldehyde	Cas No:1205-17-0 EC:214-881-6	0.5-1	Skin Sens. 1,H317 Aquatic Chronic 2,H411
hexyl salicylate	Cas No:6259-76-3 EC:228-408-6	0.5-1	Skin Irrit. 2,H315 Skin Sens. 1B,H317 Eye Irrit. 2,H319 Aquatic Acute 1,H400 Aquatic Chronic 1,H410
2,2,2-trichloro-1-phenylethyl acetate	Cas No:90-17-5 EC:201-972-0	0.1-0.5	Not classified
β-methyl-3-(1-methylethyl)benzenepropanal	Cas No:125109-85-5 EC:412-050-4	0.1-0.5	Aquatic Chronic 2, H411(M=1) Har. Classifi
Total:		100	

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

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit
[3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII
[4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII
[5] Substance of equivalent concern
[6] Additional disclosure due to company policy

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:

No known significant effects or critical hazards.

Skin contact:

Causes skin irritation. May cause an allergic skin reaction.

Ingestion:

No known significant effects or critical hazards.

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 protected from direct sunlight in a dry, cool 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-PHENYLETHANOL	DFG MAC-values list (Germany, 7/2015). Absorbed through skin.
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/m³	Workers	Systemic
	DNEL	Long term Inhalation	0.3 mg/m³	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/m³	Workers	Systemic
	DNEL	Long term Inhalation	21.7 mg/m³	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/m³	Workers	Systemic
	DNEL	Long term Dermal	2083 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	0.219 mg/m³	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/m³	Workers	Systemic
	DNEL	Long term Dermal	0.17 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Dermal	0.01 mg/m³	Workers	Local
	DNEL	Long term Inhalation	0.29 mg/m³	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/m³	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/m³	Consumers	Systemic
	DNEL	Long term Inhalation	5.5 mg/m³	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/m³	Workers	
	DNEL	Long term Inhalation	2	Workers	
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
6,6-dimethoxy-2,5,5-trimethylhex-2-ene	DNEL	Long term Inhalation	14.5 mg/m³	Workers	Systemic
	DNEL	Short term Inhalation	43.4 mg/m³	Workers	Systemic
	DNEL	Long term Inhalation	36.1 mg/m³	Workers	Local
	DNEL	Short term Inhalation	108.4 mg/m³	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/cm²	Workers	
	DNEL	Short term Oral	6.2 mg/kg	Workers	
	DNEL	Long term Inhalation	3.6 mg/m³	General population	
	DNEL	Short term Inhalation	10.7 mg/m³	General population	
	DNEL	Long term Inhalation	8.9 mg/m³	General population	
	DNEL	Short term Inhalation	26.7 mg/m³	General population	
	DNEL	Lon	2.1 mg		
	DNEL				
	DNEL				
	DNEL				
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	Systemi
Citronellol	DNEL	Long term Inhalation	161.6 mg/m³	Workers	Systemic
		Long term Dermal	327.4 mg/kg	Workers	Systemic
		Short term Dermal	2.95 mg/cm²	Workers	Local
		Long term Inhalation	47.8 mg/m³	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/cm²	Workers	
		Long term Inhalation	10mg/m³	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/m³	Consumers	Systemic
		Long term Dermal	21.2 mg/kg bw/day	Workers	Systemic
		Long term Inhalation	59.9 mg/m³	Workers	Systemic

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	Sys
		Short term Dermal	15 mg/cm²	Consumers	
		Long term Oral	0.2 mg/kg bw/day	Consumers	
		Long term Inhalation	0.7 mg/m³	Consumers	
		Long term Dermal	1.25 mg/ kg bw/day	Consumers	
		Short term Dermal	15 mg/cm²	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/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	
	DNEL	Long term Inhalation	0.078 mg/m³	Workers	
	DNEL	Long term Dermal	18.2 mg/kg bw/day	Workers	
	DNEL	Short term Inhalation	6.28 mg/m³	Workers	
	DNEL	Short term Dermal		Workers	
A mixture of: cis-tetrahydro-2-isobutyl-4-methylpyran-4-ol; trans-tetrahydro-2-isobutyl-4-methylpyran-4-ol	DNEL	Long term Oral	1 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	1.8 mg/m³	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/m³	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/m³	Consumers	Systemic
	DNEL	Long term Inhalation	5.29 mg/m³	Workers	Systemic
	DNEL	Long term Dermal	28.85 mg/kg bw/day	Workers	Local

PNECs

Product/ingredient name	Compartment Detail	Value	Method Detail
Tetrahydro-4-methyl-2-(2-methylprop-1-enyl)pyran	Fresh water	0.0332 mg/l	-
	Marine water	0.00332 mg/l	-
	Intermittent release	0.332 mg/l	-
	Sewage Treatment Plant	10 mg/l	-
	Fresh water sediment	2.29 mg/kg	-
	Marine water sediment	0.229 mg/kg	-
	Soil	0.437 mg/kg	-
Vanillin	Fresh water	0.118 mg/l	-
	Marine water	0.0118 mg/l	-
	Fresh water sediment	58.22 mg/kg	-
	Marine water sediment	5.8.2 mg/kg	-
	Soil	11.54 mg/kg	-
	Sewage Treatment Plant	10 mg/l	-

2-tert-butylcyclohexyl acetate	Fresh water	0.011 mg/l	Assessment Factors
	Marine water	0.0011 mg/l	Assessment Factors
	Sediment	1.5 mg/kg dwt	Equilibrium Partitioning
	Marine water sediment	0.15 mg/kg dwt	Equilibrium Partitioning
	Sewage Treatment Plant	10 mg/l	Assessment Factors
	Sol	0.293 mg/kg dwt	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 µg/l	-
	Marine water	0.88 µg/l	-
	Fresh water sediment	1.05 mg/kg dwt	-
	Marine water sediment	0.105 mg/kg wwt	-
	Soil	0.206 mg/kg	-
	Sewage Treatment Plant	1 mg/l	-
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	Marine water sediment	0.00256 mg/l	-
	Fresh water sediment	0.0256 mg/kg	-
	Sewage Treatment Plant	580 mg/l	-
	Marine water	0.00024 mg/l	-
	Fresh water	0.0024 mg/l	-
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	Sewage Treatment Plant	>10 mg/l	-
	Marine water sediment	0.222 mg/kg dwt	-
	Fresh water sediment	2.22 mg/kg dwt	-
	Intermittent release	2 mg/l	-
	Marine water	0.02 mg/l	-
	Fresh water	0.2 mg/l	-
	Soil	0.327 mg/kg dwt	-
α-hexylcinnamaldehyde	Fresh water	0.00138 mg/l	Assessment Factors
	Marine water	0.000138 mg/l	Assessment Factors
	Sewage Treatment Plant	10 mg/l	Assessment Factors
	Fresh water sediment	3.2 mg/kg dwt	Assessment Factors
	Marine water sediment	0.064 mg/kg dwt	Equilibrium Partitioning
	Soil	9.51 mg/kg dwt	Assessment Factors
	Secondary Poisoning	6.6 mg/l	-
	Intermittent release	0.03 mg/l	-
A mixture of: cis-tetrahydro-2-isobutyl-4-methylpyran-4-ol; trans-tetrahydro-2-isobutyl-4-methylpyran-4-ol	Fresh water	0.094 mg/l	-
	Fresh water sediment	0.412 mg/kg dwt	-
	Marine water	0.0094 mg/l	-
	Marine water sediment	0.0412 mg/kg dwt	-
	Intermittent release	0.94 mg/l	-
	Sewage Treatment Plant	10 mg/l	-
	Soil	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	1 mg/l	-
	Soil	0.31 mg/kg	-
	Marine water sediment	0.394 mg/kg	-
	Fresh water sediment	2 mg/kg	-
	Marine water	0.00044 mg/l	-
	Fresh water	0.0044 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:	Consistant to the standard sample
Gravity Density:	**0.964~0.984(25/25℃)**
Refrative index:	**1.4565~1.4765(20℃)**
Solubility in water:	Unsoluble
Flash point:	**107℃**
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	-
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/m3/22H 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/	-
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	-
6,6-dimethoxy-2,5,5-trimethylhex-2-ene	LD50 Dermal Rat >2000 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-(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,α-dimethylphenethyl acetate	LD50:Rat oral 3300mg/kg	-
4-METHYL-3-DECEN-5-OL	LD50 Oral Rat 8000 mg/kg	
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	-
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	-
A mixture of: cis-tetrahydro-2-isobutyl-4-methylpyran-4-ol; trans-tetrahydro-2-isobutyl-4-methylpyran-4-ol	LD50:Rabbit Dermal >2000 mg/kg LD:Rat Oral >5000 mg/kg	-

1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran	LD50 Rat oral >5000 mg/kg	-
Benzyl salicylate	LD50 Oral Rat 2227 mg/kg LD50 Dermal Rabbit 14150 mg/kg	-
Decanal	LD50 Rat oral 3730 uL/kg LD50 mouse oral >41750 mg/kg LD50 Dermal rabbit 5040 Ul/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	-
Pentyl salicylate	LD50:Dermal Rabbit >5000 mg/kg LD50:Oral Rat 4100 mg/kg	-
METHYL ANTHRANILATE	LD50:Rabbit Dermal >5 g/kg LD50:Rat Oral 2910 mg/kg	-
Hexyl salicylate	LD50 Dermal Rabbit >5 g/kg LD50 Oral Rat >5 g/kg	-
Vanillin	LD50 Rat oral 1580 mg/kgLC Rabbit ihalation >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	-
2,6-DIMETHYLOCT-7-EN-2-OL	LD50 Rat oral 3600 mg/kg LD50:Dermal rabbit >5 gm/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	-
Undecan-4-olide	LD50 Rat oral 18,500 mg/kg LC50:Rainbow trout 569mg/L-96h EC50:Water flea 17.0 mg/L-48h	-
LINALYL ACETATE	LD50 Rat oral 13934 mg/kg LD50 Rabbit Dermal >5000 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
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 Mililiters 24 hours 500mg	-
2,6-DIMETHYLOCT-7-EN-2-OL	Eyes - Mild irritant Skin - Mild irritant Skin - Mild irritant	Rabbit Rabbit Rabbit	-	7.5% 4 hours 0.5 Ml 24 hours 500 mg	- - -
2-ethyl-4-(2,2,3-trimethyl-3-cyclopenten-1-yl)-2-buten-1-ol	Eyes - Irritant	Mammal - species unspecified	-	-	-
Citronellol	Eyes - Moderate irritant Skin - Severe irritant Skin - Moderate irritant Skin - Moderate irritant Skin - Severe irritant	Rabbit Guinea pig Man Rabbit Rabbit	- - - -	0.42% 24 hours 100mg 8 hours 16mg 4 hours 0.42%	-
2-PHENYLETHANOL	Eyes - Mild irritant Eyes - Severe irritant	Rabbit Rabbit	-	10 minutes 12 g 24 hours 750 mg	-
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	- - - - - - -
α-hexylcinnamaldehyde	Skin - Erythema/Eschar Eyes - Redness of the conjunctivae	Rabbit Rabbit	2 0.33	-	-

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
α-hexylcinnamaldehyde	skin	Mouse	Sensitising

1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	skin	Mouse	Sensitising

Mutagenicity

Product/ingredient name	Test	Experiment	Result
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
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-	-	Experiment: In vivo Subject: Mammalian-Animal Experiment: In vitro Subject: Mammalian-Human	Negative Negative

Potential acute health effects

Eye contact:

Causes serious eye damage.

Inhalation:

No known significant effects or critical hazards.

Skin contact:

Causes skin irritation. May cause an allergic skin reaction.

Ingestion:

No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact:

Adverse symptoms may include the following:

pain

watering

redness

Inhalation:

No specific data.

Skin contact:

Adverse symptoms may include the following:

pain or irritation

redness

blistering may occur

Ingestion:

Adverse symptoms may include the following:

stomach pains

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
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

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
A mixture of: cis-tetrahydro-2-isobutyl-4-methylpyran-4-ol; trans-tetrahydro-2-isobutyl-4-methylpyran-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
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 Minut 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
6,6-dimethoxy-2,5,5-trimethylhex-2-ene	Acute EC50 50.7 mg/l	Daphnia	48 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
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
α-methyl-1,3-benzodioxole-5-propionaldehyde	Acute EC50 8.3 mg/l	Daphnia	48 hours
LINALYL ACETATE	Acute EC50 15 mg/l Acute LC50 11 mg/l	Daphnia Fish	48 Hours 96 Hours

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-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/1 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
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

12.2 Persistence and degradabilit

Product/ingredient nam	Test	Result	Dose	Inoculum
α,α-dimethylphenethyl acetate	OECD 301F Ready Biodegradability - Manometric Respirometry Test	79 % - Readily - 28 days	-	-
2,2,2-trichloro-1-phenylethyl acetate				
Hexyl salicylate	OECD 301F Ready Biodegradability - Manometric Respirometry Test	91 % - Readily - 28 days	-	-

α-methyl-1,3-benzodioxole-5-propionaldehyde	OECD 301B Ready Biodegradability -CO2 Evolution Test	29 % - Not readily - 28 days	-	-
BENZYL ACETATE	OECD 301B Ready Biodegradability -CO2 Evolution Test	92 % - 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		
6,6-dimethoxy-2,5,5-trimethylhex-2-ene	OECD 301D Ready Biodegradability -Closed Bottle Test	<60 % - Not readily - 28 days		
3-methyl-5-phenylpentanol				
2,4-dimethyl-4,4a,5,9b-tetrahydroindeno[1,2-d]-1,3-dioxin				
2-(2-ethoxyethoxy)ethanol				
Benzyl salicylate				
4-METHYL-3-DECEN-5-OL	OECD 301F Ready Biodegradability - Manometric Respirometry Test	73 % - Readily - 28 days	-	-
Citronellol	OECD 301F Ready Biodegradability - Manometric Respirometry Test	90 % - Readily - 28 days	-	-
3-methyl-4-(2,6,6-trimethyl-2-cyclohexen-1-yl)-3-buten-2-one	-	77 % - Readily - 28 days	-	-
2-PHENYLETHANOL	OECD 301B Ready Biodegradability -CO_2 Evolution Test	79 % - Readily - 28 days	-	-
Linalool	OECD 301C Ready Biodegradability -Modified MITI Test (I)	64.2 % - Readily - 28 days	-	-
α-hexylcinnamaldehyde	OECD 301F Ready Biodegradability - Manometric Respirometry Test	97 % - Readily - 28 days	-	-
A mixture of: cis-tetrahydro-2-isobutyl-4-methylpyran-4-ol; trans-tetrahydro-2-isobutyl-4-methylpyran-4-ol	OECD 301C Ready Biodegradability -Modified MITI Test (I)	<60 % - Not readily - 28 days	-	-
1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran	OECD 301F Ready Biodegradability - Manometric Respirometry Test	2 % - Not 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	-	-
2-methyl-4-phenylbutan-2-ol				
Decanal	OECD 301F Ready Biodegradability - Manometric Respirometry Test	82 % - Readily - 28 days		
Allyl (3-methylbutoxy)acetate	OECD 301F Ready Biodegradability - Manometric Respirometry Test	74 % - Inherent - 32 days	-	-
7-methyl-2H-benzo-1,5-dioxepin-3(4H)-one				
LINALYL ACETATE	OECD 301F Ready Biodegradability - Manometric Respirometry Test	75 % - Readily - 28 days	-	
2,4-dimethylcyclohex-3-ene-1-carbaldehyde				
Tetrahydro-4-methyl-2-(2-methylprop-1-enyl)pyran	OECD 301F Ready Biodegradability - Manometric Respirometry Test	79 % - Readily - 28 days		
Pentyl salicylate	OECD 301D Ready Biodegradability -Closed Bottle Test	84 % - Readily - 28 days	-	-
METHYL ANTHRANILATE	OECD 301F Ready Biodegradability - Manometric Respirometry Test	85 % - Readily - 28 days	Activated sludge	
Decan-4-olide				
2,6-DIMETHYLOCT-7-EN-2-OL	OECD 301B Ready	72 % - Readily - 28 days	-	-
Ethyl 2-methylbutyrate				
(Z)-hex-3-enyl acetate				
1-(2,6,6-trimethyl-1,3-cyclohexadien-1-yl)-2-buten-1-one				
Vanillin	OECD 301F Ready Biodegradability - Manometric Respirometry Test	>60 % - Readily - 28 days	-	-

2-tert-butylcyclohexyl acetate	OECD 301F Ready Biodegradability - Manometric Respirometry Test	43 % - Not readily - 28 days	-	-
cis-hex-3-en-1-ol				
β-methyl-3-(1-methylethyl)benzenepropanal				
Methyl 2,4-dihydroxy-3,6-dimethylbenzoate	OECD 301F Ready Biodegradability - Manometric Respirometry Test	63 % - Readily - 28 days	-	-
Nerol	OECD 301F Ready Biodegradability - Manometric Respirometry Test	86 % - Readily - 28 days	-	-
Undecan-4-olide				
Anisaldehyde				
1-phenylethyl acetate				

Product/ingredient nam	**Aquatic half-life**	**Photolysis**	**Biodegradability**
α-methyl-1,3-benzodioxole-5-propionaldehyde	-	-	Not readily
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	-	-	Not readily
A mixture of: cis-tetrahydro-2-isobutyl-4-methylpyran-4-ol; trans-tetrahydro-2-isobutyl-4-methylpyran-4-ol	-	-	Not readily
α-hexylcinnamaldehyde	-	-	Readily
Linalool	-	-	Readily
2-PHENYLETHANOL	-	-	Readily
3-methyl-4-(2,6,6-trimethyl-2-cyclohexen-1-yl)-3-buten-2-one	-	-	Readily
Citronellol	-	-	Readily
α,α-dimethylphenethyl acetate	-	-	Readily
Benzyl salicylate	-	-	Readily
2-ethyl-4-(2,2,3-trimethyl-3-cyclopenten-1-yl)-2-buten-1-ol	-	-	Not readily

1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran	-	-	Not readily
BENZYL ACETATE	-	-	Readily
LINALYL ACETATE	-	-	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
Decanal	-	-	Readily
Vanillin	-	-	Readily
METHYL ANTHRANILATE	-	-	Readily
Tetrahydro-4-methyl-2-(2-methylprop-1-enyl)pyran	-	-	Readily
6,6-dimethoxy-2,5,5-trimethylhex-2-ene	-	-	Not readily

12.3 Bioaccumulative potential

Product/ingredient nam	LogPow	BCF	Potential
Hexyl salicylate	hexyl salicylate	8913	High
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphthalenyl)ethanone	-	High
A mixture of: cis-tetrahydro-2-isobutyl-4-methylpyran-4-ol; trans-tetrahydro-2-isobutyl-4-methylpyran-4-ol	cis-tetrahydro-2-isobutyl-4-methylpyran-4-ol	-	Low
α-hexylcinnamaldehyde	α-hexylcinnamaldehyde	6000	High
Linalool	linalool	-	Low
2-PHENYLETHANOL	2-phenylethanol	-	Low
Citronellol	citronellol	82.59	Low
α,α-dimethylphenethyl acetate	2-Methyl-1-phenylpropan-2-ylacetat	-	Low
Benzyl salicylate	benzyl salicylate	311	Low

6,6-dimethoxy-2,5,5-trimethylhex-2-ene	6,6-Dimethoxy-2,5,5-trimethylhex-2-ene	-	Low
2-ethyl-4-(2,2,3-trimethyl-3-cyclopenten-1-yl)-2-buten-1-ol	2-ethyl-4-(2,2,3-trimethyl-3-cyclopenten-1-yl)-2-buten-1-ol	667	High
1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran	1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylcyclopenta[g]-2-benzopyran	2507	High
α-methyl-1,3-benzodioxole-5-propionaldehyde	α-methyl-1,3-benzodioxole-5-propionaldehyde	-	Low
LINALYL ACETATE	linalyl acetate	173.9	Low
2,6-DIMETHYLOCT-7-EN-2-OL	2,6-dimethyloct-7-en-2-ol	64.8	Low
4-METHYL-3-DECEN-5-OL	4-methyl-3-decen-5-ol	-	Low
Nerol	nerol	-	Low
Methyl 2,4-dihydroxy-3,6-dimethylbenzoate	methyl 2,4-dihydroxy-3,6-dimethylbenzoate	-	Low
2-tert-butylcyclohexyl acetate	2-tert-butylcyclohexyl acetate	-	High
Decanal	decanal	-	Low
Vanillin	vanillin	-	Low
METHYL ANTHRANILATE	methyl anthranilate	-	Low
Pentyl salicylate	pentyl salicylate	-	Readily
Tetrahydro-4-methyl-2-(2-methylprop-1-enyl)pyran	tetrahydro-4-methyl-2-(2-methylprop-1-enyl)pyran	-	Low
BENZYL ACETATE	benzyl acetate	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

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

Additional information

14.6 Special precautions for user

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

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code:

Not applicable.

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]

	Classification	Justification
	Skin Irrit. 2, H315	Calculation method
	Skin Sens. 1B, H317	Calculation method
	Eye Irrit. 2/2A, H319	Calculation method
	Aquatic Chronic 2, H411	Calculation method

Full text of abbreviated H statements

H302	Harmful if swallowed
H226	Flammable liquid and vapour.
H315	Causes skin irritation
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects

Version No: 1.1

Revision Time:2023/8/10

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.