Trade name: LINARI - ACQUA SANTA

Current version : 2.0.0, issued: 04.06.2024 **Replaced version:** 1.0.1, issued: 16.12.2022 **Region:** IE

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

1.1 Product identifier

Trade name

LINARI - ACQUA SANTA

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

Relevant identified uses of the substance or mixture
Perfumes, fragrances

Uses advised against
No data available.

1.3 Details of the supplier of the safety data sheet

Address
LINARI GmbH
Jaffestrasse 12 | DOCK 2
21109 Hamburg
Germany

Telephone no. +49 40-7566850
Fax no. +49 40-7534505

Advice on Safety Data Sheet
sdb_info@umco.de

1.4 Emergency telephone number

+353 1 809 2166 (National Poisons Information Centre)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification in accordance with Regulation (EC) No 1272/2008 (CLP)
Aquatic Chronic 2; H411
Eye Irrit. 2; H319
Flam. Liq. 2; H225
Skin Sens. 1; H317

Classification information
This product is assessed and classified using the methods and criteria below referred to in Article 9 of Regulation (EC) n° 1272/2008:
Physical hazards: determined through assessment data based on the methods or standards referred to in part 2 of Annex I to CLP
Health hazards and environmental hazards: determined through toxicological and ecotoxicological assessment data based on the methods or standards referred to in Part 3, 4 and 5 of Annex I to CLP.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 (CLP Regulation)

Hazard pictograms


GHS02


GHS07


GHS09

Signal word
Danger

Hazardous component(s) to be indicated on label:
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1 one
linalool
3,7-dimethylnona-1,6-dien-3-ol
(E)-2-methoxy-4-(prop-1-enyl)phenol

Hazard statement(s)

H225	Highly flammable liquid and vapour.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H411	Toxic to aquatic life with long lasting effects.

Hazard statements (EU)

EUH208	Contains geraniol, (R)-p-mentha-1,8-diene, linalyl acetate, pin-2(10)-ene, 3-methyl-4-(2,6,6-trimethyl-2-cyclohexen-1-yl)-3-buten-2-one, Citronellol. May produce an allergic reaction.

Precautionary statement(s)

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P370+P378	In case of fire: Use sand, fire powder, carbon dioxide or foam to extinguish.
P391	Collect spillage.
P501	Dispose of contents/container to a facility in accordance with local and national regulations.

2.3 Other hazards

PBT assessment
No data available.

vPvB assessment
No data available.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable. The product is not a substance.

3.2 Mixtures

Hazardous ingredients

No	Substance name		Additional information	
	CAS / EC / Index / REACH no	Classification (EC) 1272/2008 (CLP)	Concentration	%
1	**ethanol**			
	64-17-5 200-578-6 603-002-00-5 01-2119457610-43	Flam. Liq. 2; H225 Eye Irrit. 2; H319	>= 70,00 - < 90,00	wt%
2	**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 - -	Aquatic Chronic 1; H410 Skin Sens. 1; H317 Skin Irrit. 2; H315	< 5,00	wt%
3	**OXACYCLOHEXADECEN-2-ONE**			
	34902-57-3 422-320-3 606-092-00-4 -	Aquatic Acute 1; H400 Aquatic Chronic 1; H410	< 2,50	wt%
4	**2-phenylethanol**			
	60-12-8 200-456-2 - -	Acute Tox. 4; H302 Eye Irrit. 2; H319	< 2,50	wt%
5	**linalool**			

	78-70-6 201-134-4 603-235-00-2 -	Skin Irrit. 2; H315 Skin Sens. 1B; H317 Eye Irrit. 2; H319	< 2,50	wt%
6	**A mixture of: cis-tetrahydro-2-isobutyl-4-methylpyran-4-ol;trans-tetrahydro-2-isobutyl-4-methylpyran-4-ol**			
	- 405-040-6 603-101-00-3 01-0000015458-64	Eye Irrit. 2; H319	< 2,50	wt%
7	**3,7-dimethylnona-1,6-dien-3-ol**			
	10339-55-6 233-732-6 - 01-2119969272-32	Eye Irrit. 2; H319 Skin Irrit. 2; H315 Skin Sens. 1B; H317	< 2,50	wt%
8	**(Z)-3-hexenyl salicylate**			
	65405-77-8 265-745-8 - 01-2119987320-37	Aquatic Acute 1; H400	< 2,50	wt%
9	**geraniol**		**pls. refer to footnote (1)**	
	106-24-1 203-377-1 603-241-00-5 -	Eye Dam. 1; H318 Skin Irrit. 2; H315 Skin Sens. 1; H317	< 2,50	wt%
10	**(R)-p-mentha-1,8-diene**			
	5989-27-5 227-813-5 601-096-00-2 -	Flam. Liq. 3; H226 Asp. Tox. 1; H304 Skin Irrit. 2; H315 Skin Sens. 1B; H317 Aquatic Acute 1; H400 Aquatic Chronic 3; H412	< 0,50	wt%
11	**4-methyl-3-decen-5-ol**			
	81782-77-6 279-815-0 - 01-2119983528-21	Aquatic Acute 1; H400 Aquatic Chronic 2; H411	< 0,50	wt%
12	**linalyl acetate**			
	115-95-7 204-116-4 - -	Skin Irrit. 2; H315 Eye Irrit. 2; H319 Skin Sens. 1B; H317	< 0,50	wt%
13	**pin-2(10)-ene**			
	127-91-3 204-872-5 - 01-2119519230-54	Aquatic Acute 1; H400 Asp. Tox. 1; H304 Flam. Liq. 3; H226 Skin Sens. 1B; H317 Aquatic Chronic 1; H410 Skin Irrit. 2; H315	< 0,50	wt%
14	**3-methyl-4-(2,6,6-trimethyl-2-cyclohexen-1-yl)-3-buten-2-one**			
	127-51-5 204-846-3 - -	Aquatic Chronic 2; H411 Skin Sens. 1B; H317	< 0,50	wt%
15	**Citronellol**			
	106-22-9 203-375-0 - 01-2119453995-23	Eye Irrit. 2; H319 Skin Irrit. 2; H315 Skin Sens. 1B; H317	< 0,50	wt%
16	**(E)-2-methoxy-4-(prop-1-enyl)phenol**		**pls. refer to footnote (2)**	

	5932-68-3 227-678-2 604-094-00-X 01-2120223682-61	Acute Tox. 4; H302 Acute Tox. 4; H312 Acute Tox. 4; H332 Skin Irrit. 2; H315 Skin Sens. 1A; H317 Eye Irrit. 2; H319 STOT SE 3; H335	< 0,10	wt%

Full Text for all H-phrases and EUH-phrases: pls. see section 16
(1) Aberrant from/in addition to the classification set out in Annex VI, this substance is classified according to European Regulation (EC) No 1272/2008 (CLP), Article 4 (3), paragraph 2.
(2) According to the latest state of knowledge and applying the criteria set out in annex I to Regulation (EC) No 1272/2008 , the aforementioned classification is required. This classification goes beyond the classification set out in table 3, Annex VI to Regulation (CE) No 1272/2008.

No	Note	Specific concentration limits	M-factor (acute)	M-factor (chronic)
1	-	Eye Irrit. 2; H319: C >= 50%	-	-
8	-	-	M = 1	-
10	-	-	M = 1	-
11	-	-	-	M = 1
16	-	Skin Sens. 1A; H317: C >= 0,01%	-	-

SECTION 4: First aid measures

4.1 Description of first aid measures

General information
Remove contaminated clothing and shoes immediately, and launder thoroughly before reusing. In case of persisting adverse effects, consult a physician. In case of allergic symptoms, especially respiratory tract related, seek medical help immediately.

After inhalation
Remove affected persons from dangerous area by observing suitable respiratory protection measures. Ensure supply of fresh air.

After skin contact
Rinse with plenty of water. Wash skin thoroughly with soap and water or use recognised skin cleanser.

After eye contact
Remove contact lenses. Rinse eye thoroughly under running water keeping eyelids wide open and protecting the unaffected eye (at least 10 to 15 minutes). Get medical attention if pain still persists.

After ingestion
Rinse the mouth thoroughly with water. Do not induce vomiting. Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed
No data available.

4.3 Indication of any immediate medical attention and special treatment needed
No data available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media
Alcohol resistant foam, CO2, powders, water spray

Unsuitable extinguishing media
High power water jet

5.2 Special hazards arising from the substance or mixture
In the event of fire, the following can be released: Carbon dioxide (CO2); Carbon monoxide (CO); Nitrogen oxides (NOx)

5.3 Advice for firefighters

Use self-contained breathing apparatus. Wear protective clothing. Containers close to fire should be transferred to a safe place. Cool closed containers exposed to fire with water. Run-off water from fire fighting must not be discharged into drains or enter surface water.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel
Refer to protective measures listed in sections 7 and 8. Keep away from ignition sources.

For emergency responders
Personal protective equipment (PPE) - see section 8.

6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater. Do not discharge into the subsoil/soil. In case of entry into waterways, soil or drains, inform the responsible authorities.

6.3 Methods and material for containment and cleaning up

Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in container for disposal according to local regulations (see section 13).

6.4 Reference to other sections

Information regarding safe handling, see section 7. Information regarding personal protective measures, see section 8. Information regarding waste disposal, see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling
Risks inherent to handling the product must be minimised by applying the appropriate protective and preventive measures. Working processes should - so far as possible, according to the state of the art - be designed to rule out bodily contact or the release of hazardous substances.

General protective and hygiene measures
Do not eat, drink or smoke during work time. Keep away from foodstuffs and beverages. Do not inhale vapours. Avoid contact with eyes and skin. Wash hands before breaks and after work. Remove contaminated clothing and shoes and launder thoroughly before reusing.

Advice on protection against fire and explosion
Vapours can form an explosive mixture with air. Isolate from sources of heat, sparks and open flame. Take precautionary measures against electrostatic loading (earthing necessary during loading operations). Use explosion-proof equipment/fittings and non-sparking tools.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions
Keep container tightly closed and dry in a cool, well-ventilated place.

Requirements for storage rooms and vessels
Containers which are opened must be carefully closed and kept upright to prevent leakage. Always keep in containers of same material as the original.

Incompatible products
Substances to be avoided, see section 10.

7.3 Specific end use(s)

No data available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values

No	Substance name	CAS no.	EC no.
1	ethanol	64-17-5	200-578-6
	List of Chemical Agents and Occupational Exposure Limit Values (Code of Practice)		

	Ethanol		
	WEL short-term (15 min reference period)	1000	ppm

DNEL, DMEL and PNEC values

DNEL values (worker)

No	Substance name			CAS / EC no	
	Route of exposure	**Exposure time**	**Effect**	**Value**	
1	**ethanol**			**64-17-5 200-578-6**	
	dermal	Long term (chronic)	systemic	8238	mg/kg/day
	inhalative	Long term (chronic)	systemic	380	mg/m³
2	**A mixture of: cis-tetrahydro-2-isobutyl-4-methylpyran-4-ol;trans-tetrahydro-2-isobutyl-4-methylpyran-4-ol**			**- 405-040-6**	
	dermal	Long term (chronic)	systemic	41,7	mg/kg/day
	inhalative	Long term (chronic)	systemic	44,1	mg/m³
3	**3,7-dimethylnona-1,6-dien-3-ol**			**10339-55-6 233-732-6**	
	dermal	Long term (chronic)	systemic	2,7	mg/kg/day
	dermal	Short term (acut)	systemic	5,5	mg/kg/day
	dermal	Long term (chronic)	local	1,6	mg/cm²
	dermal	Short term (acut)	local	1,6	mg/cm²
	inhalative	Long term (chronic)	systemic	3	mg/m³
	inhalative	Short term (acut)	systemic	18	mg/m³
4	**(Z)-3-hexenyl salicylate**			**65405-77-8 265-745-8**	
	dermal	Long term (chronic)	systemic	0,9	mg/kg bw/day
	inhalative	Long term (chronic)	systemic	1,59	mg/m³
5	**4-methyl-3-decen-5-ol**			**81782-77-6 279-815-0**	
	dermal	Long term (chronic)	systemic	10	mg/kg bw/day
	dermal	Short term (acut)	systemic	10	mg/kg bw/day
	dermal	Long term (chronic)	local	25	mg/cm²
	dermal	Short term (acut)	local	25	mg/cm²
	inhalative	Long term (chronic)	systemic	98,7	mg/m³
	inhalative	Short term (acut)	systemic	35,26	mg/m³
	inhalative	Long term (chronic)	local	88,16	mg/m³
	inhalative	Short term (acut)	local	88,16	mg/m³
6	**pin-2(10)-ene**			**127-91-3 204-872-5**	
	dermal	Long term (chronic)	systemic	0,8	mg/kg/day
	dermal	Long term (chronic)	local	54	µg/cm²
	inhalative	Long term (chronic)	systemic	5,69	mg/m³

DNEL value (consumer)

No	Substance name			CAS / EC no	
	Route of exposure	**Exposure time**	**Effect**	**Value**	
1	**ethanol**			**64-17-5 200-578-6**	
	inhalative	Long term (chronic)	systemic	114	mg/m³
2	**A mixture of: cis-tetrahydro-2-isobutyl-4-methylpyran-4-ol;trans-tetrahydro-2-isobutyl-4-methylpyran-4-ol**			**- 405-040-6**	
	oral	Long term (chronic)	systemic	7,5	mg/kg/day
	dermal	Long term (chronic)	systemic	25	mg/kg/day
	inhalative	Long term (chronic)	systemic	13	mg/m³
3	**3,7-dimethylnona-1,6-dien-3-ol**			**10339-55-6 233-732-6**	
	oral	Long term (chronic)	systemic	0,2	mg/kg/day
	oral	Short term (acut)	systemic	1,3	mg/kg/day
	dermal	Long term (chronic)	systemic	1,4	mg/kg/day
	dermal	Short term (acut)	systemic	2,7	mg/kg/day

	dermal	Long term (chronic)	local	1,6	mg/cm²
	dermal	Short term (acut)	local	1,6	mg/cm²
	inhalative	Long term (chronic)	systemic	0,74	mg/m³
	inhalative	Short term (acut)	systemic	4,4	mg/m³
4	**(Z)-3-hexenyl salicylate**			**65405-77-8 265-745-8**	
	oral	Long term (chronic)	systemic	0,23	mg/kg bw/day
	dermal	Long term (chronic)	systemic	0,45	mg/kg bw/day
	inhalative	Long term (chronic)	systemic	0,39	mg/m³
5	**4-methyl-3-decen-5-ol**			**81782-77-6 279-815-0**	
	oral	Long term (chronic)	systemic	10	mg/kg bw/day
	oral	Short term (acut)	systemic	5	mg/kg bw/day
	dermal	Long term (chronic)	systemic	89,3	µg/kg bw/day
	dermal	Short term (acut)	systemic	5	mg/kg bw/day
	dermal	Long term (chronic)	local	12,5	mg/cm²
	dermal	Short term (acut)	local	12,5	mg/cm²
	inhalative	Long term (chronic)	systemic	14,38	mg/m³
	inhalative	Short term (acut)	systemic	8,7	mg/m³
	inhalative	Long term (chronic)	local	21,74	mg/m³
	inhalative	Short term (acut)	local	21,74	mg/m³
6	**pin-2(10)-ene**			**127-91-3 204-872-5**	
	oral	Long term (chronic)	systemic	0,3	mg/kg/day
	dermal	Long term (chronic)	systemic	0,3	mg/kg/day
	dermal	Long term (chronic)	local	27	µg/cm²
	inhalative	Long term (chronic)	systemic	1	mg/m³

PNEC values

No	Substance name		CAS / EC no	
	ecological compartment	**Type**	**Value**	
1	**ethanol**		**64-17-5 200-578-6**	
	water	fresh water	0,96	mg/L
	water	marine water	0,79	mg/L
	water	fresh water sediment	3,6	mg/kg dry weight
	water	marine water sediment	2,9	mg/L
	soil	-	0,63	mg/kg dry weight
	sewage treatment plant	-	580	mg/L
	secondary poisoning	-	0,38	g/kg
	with reference to: food			
2	**A mixture of: cis-tetrahydro-2-isobutyl-4-methylpyran-4-ol;trans-tetrahydro-2-isobutyl-4-methylpyran-4-ol**		**- 405-040-6**	
	water	fresh water	0,094	mg/L
	water	marine water	0,009	mg/L
	water	fresh water sediment	0,412	mg/kg dry weight
	water	marine water sediment	0,041	mg/kg dry weight
	soil	-	0,09	mg/kg dry weight
	sewage treatment plant	-	10	mg/L
3	**3,7-dimethylnona-1,6-dien-3-ol**		**10339-55-6 233-732-6**	
	water	fresh water	0,023	mg/L
	water	marine water	0,002	mg/L
	water	Aqua intermittent	0,23	mg/L
	water	fresh water sediment	0,223	mg/kg dry weight

	water	marine water sediment	0,022	mg/kg dry weight
	soil	-	0,031	mg/kg dry weight
	sewage treatment plant	-	10	mg/L
	secondary poisoning	-	8,53	mg/kg
	with reference to: food			
4	**(Z)-3-hexenyl salicylate**		**65405-77-8 265-745-8**	
	water	fresh water	0,61	µg/L
	water	marine water	0,061	µg/L
	water	fresh water sediment	0,11	mg/kg dry weight
	water	marine water sediment	0,011	mg/kg dry weight
	soil	-	0,022	mg/kg
	with reference to: dry weight			
	sewage treatment plant	-	10	mg/L
	secondary poisoning	-	40	mg/kg
	with reference to: food			
5	**4-methyl-3-decen-5-ol**		**81782-77-6 279-815-0**	
	water	fresh water	0,76	µg/L
	water	marine water	76	ng/L
	water	fresh water sediment	92	µg/kg
	with reference to: dry weight			
	water	marine water sediment	9,2	µg/kg
	with reference to: dry weight			
	soil	-	18	µg/kg
	with reference to: dry weight			
	sewage treatment plant	-	10	mg/L
	secondary poisoning	-	111,1	mg/kg
	with reference to: food			
6	**pin-2(10)-ene**		**127-91-3 204-872-5**	
	water	fresh water	1,004	µg/L
	water	marine water	0,1	µg/L
	water	fresh water sediment	0,337	mg/kg dry weight
	water	marine water sediment	0,034	mg/kg dry weight
	soil	-	0,067	mg/kg dry weight
	sewage treatment plant	-	3,26	mg/L
	secondary poisoning	-	13,1	mg/kg food

8.2 Exposure controls

Appropriate engineering controls
Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL (=Occupational Exposure Limit), suitable respiratory protection must be worn.

Personal protective equipment

Respiratory protection
If workplace exposure limits are exceeded, a respiration protection approved for this particular job must be worn. In case of aerosol and mist formation, take appropriate measures for breathing protection in the event workplace threshold values are not specified.

Eye / face protection
Safety glasses with side protection shield (EN 166)

Hand protection

Sufficient protection is given wearing suitable protective gloves checked according to i.e. EN 374, in the event of risk of skin contact with the product. Before use, the protective gloves should be tested in any case for its specific work-station suitability (i.e. mechanical resistance, product compatibility and antistatic properties). Adhere to the manufacturer's instructions and information relating to the use, storage, care and replacement of protective gloves. Protective gloves shall be replaced immediately when physically damaged or worn. Design operations thus to avoid permanent use of protective gloves.

Other
Chemical-resistant work clothes.

Environmental exposure controls
No data available.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

State of aggregation
liquid

Colour
No data available

Odour
No data available

pH value
No data available

Boiling point / boiling range	
Value	78 °C
Reference substance	Ethanol

Melting point/freezing point
No data available

Decomposition temperature
No data available

Flash point	
Value	13 °C
Reference substance	Ethanol

Ignition temperature
No data available

Flammability
No data available

Lower explosion limit
No data available

Upper explosion limit
No data available

Vapour pressure
No data available

Relative vapour density
No data available

Relative density
No data available

Density
No data available

Solubility
No data available

Partition coefficient n-octanol/water (log value)				
No	**Substance name**	**CAS no.**		**EC no.**
1	**ethanol**	**64-17-5**		**200-578-6**
log Pow			-0,35	
Reference temperature			24	°C
with reference to		pH 7,4		
Method		OECD 107		
Source		ECHA		
2	**A mixture of: cis-tetrahydro-2-isobutyl-4-methylpyran-4-ol;trans-tetrahydro-2-isobutyl-4-methylpyran-4-ol**	**-**		**405-040-6**
log Pow		appr.	1,65	
Reference temperature			23	°C
Method		EU Method A.8		
Source		ECHA		
3	**(Z)-3-hexenyl salicylate**	**65405-77-8**		**265-745-8**
log Pow			4,8	
Reference temperature			25	°C
Method		OECD 117		
Source		ECHA		
4	**4-methyl-3-decen-5-ol**	**81782-77-6**		**279-815-0**
log Pow			3,9	
Reference temperature			30	°C
with reference to		pH 7		
Method		OECD 117		
Source		ECHA		

Kinematic viscosity
No data available

Particle characteristics
No data available

9.2 Other information

Other information
No data available.

SECTION 10: Stability and reactivity

10.1 Reactivity

Dangerous reactions are not expected if the product is handled according to its intended use.

10.2 Chemical stability

Stable under recommended storage and handling conditions (See section 7).

10.3 Possibility of hazardous reactions

Dangerous reactions are not to be expected when handling product according to its intended use.

10.4 Conditions to avoid

Heat, naked flames and other ignition sources.

10.5 Incompatible materials

Keep away from oxidizing agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions.

10.6 Hazardous decomposition products

None, if handled according to intended use.

SECTION 11: Toxicological information

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

Acute oral toxicity (result of the ATE calculation for the mixture)	
No	**Product Name**
1	**LINARI - ACQUA SANTA**

Comments	The result of the applied calculation method according to the European Regulation (EC) 1272/2008 (CLP), Paragraph 3.1.3.6, Part 3 of Annex I is outside the values that imply a classification / labelling of this mixture according to table 3.1.1 defining the respective categories (ATE oral > 2000 mg/kg).

Acute oral toxicity				
No	**Substance name**	**CAS no.**		**EC no.**
1	**ethanol**	**64-17-5**		**200-578-6**
LD50		10470		mg/kg bodyweight
Species		rat		
with reference to		95% ethanol in water		
Method		OECD 401		
Source		ECHA		
Evaluation/classification		Based on available data, the classification criteria are not met.		
2	**A mixture of: cis-tetrahydro-2-isobutyl-4-methylpyran-4-ol;trans-tetrahydro-2-isobutyl-4-methylpyran-4-ol**	**-**		**405-040-6**
LD50		>	2000	mg/kg bodyweight
Species		rat		
Method		OECD 401		
Source		ECHA		
3	**(Z)-3-hexenyl salicylate**	**65405-77-8**		**265-745-8**
LD50			3031	mg/kg bodyweight
Species		rat (female)		
Method		EU Method B.1		
Source		ECHA		

Acute dermal toxicity				
No	**Substance name**	**CAS no.**		**EC no.**
1	**A mixture of: cis-tetrahydro-2-isobutyl-4-methylpyran-4-ol;trans-tetrahydro-2-isobutyl-4-methylpyran-4-ol**	**-**		**405-040-6**
LD50		>	2000	mg/kg bodyweight
Species		rabbit		
Method		OECD 402		
Source		ECHA		
2	**(Z)-3-hexenyl salicylate**	**65405-77-8**		**265-745-8**
LD50		>	2000	mg/kg bodyweight
Species		rabbit		
Method		EU Method B.3		
Source		ECHA		

Acute inhalational toxicity				
No	**Substance name**	**CAS no.**		**EC no.**
1	**ethanol**	**64-17-5**		**200-578-6**
LC50			124,7	mg/l
Duration of exposure			4	h
State of aggregation		Vapour		
Species		rat		
Method		OECD 403		
Source		ECHA		
Evaluation/classification		Based on available data, the classification criteria are not met.		

Skin corrosion/irritation		
No	**Substance name**	**CAS no.**	**EC no.**
1	**ethanol**	**64-17-5**	**200-578-6**
Species		rabbit	
Method		OECD 404	
Source		ECHA	
Evaluation		non-irritant	
Evaluation/classification		Based on available data, the classification criteria are not met.	

2	**A mixture of: cis-tetrahydro-2-isobutyl-4-methylpyran-4-ol;trans-tetrahydro-2-isobutyl-4-methylpyran-4-ol**	**-**	**405-040-6**
Duration of exposure		4	h
Species		rabbit	
Method		OECD 404	
Source		ECHA	
Evaluation		non-irritant	
3	**4-methyl-3-decen-5-ol**	**81782-77-6**	**279-815-0**
Species		rabbit	
Method		OECD 404	
Source		ECHA	
Evaluation		non-irritant	
Evaluation/classification		Based on available data, the classification criteria are not met.	

Serious eye damage/irritation			
No	**Substance name**	**CAS no.**	**EC no.**
1	**ethanol**	**64-17-5**	**200-578-6**
Species		rabbit	
Method		OECD 405	
Source		ECHA	
Evaluation		irritant	
Evaluation/classification		Based on available data, the classification criteria are met.	
2	**A mixture of: cis-tetrahydro-2-isobutyl-4-methylpyran-4-ol;trans-tetrahydro-2-isobutyl-4-methylpyran-4-ol**	**-**	**405-040-6**
Species		rabbit	
Method		OECD 405	
Source		ECHA	
Evaluation		Irritating to eyes	
3	**(Z)-3-hexenyl salicylate**	**65405-77-8**	**265-745-8**
Species		rabbit	
Method		EU B.5	
Source		ECHA	
Evaluation		non-irritant	
4	**4-methyl-3-decen-5-ol**	**81782-77-6**	**279-815-0**
Species		rabbit	
Method		OECD 405	
Source		ECHA	
Evaluation		non-irritant	
Evaluation/classification		Based on available data, the classification criteria are not met.	

Respiratory or skin sensitisation			
No	**Substance name**	**CAS no.**	**EC no.**
1	**ethanol**	**64-17-5**	**200-578-6**
Route of exposure		respiratory tract	
Source		ECHA	
Evaluation		non-sensitizing	
Evaluation/classification		Based on available data, the classification criteria are not met.	
Route of exposure		Skin	
Species		mouse	
Source		ECHA	
Evaluation		non-sensitizing	
Evaluation/classification		Based on available data, the classification criteria are not met.	
2	**A mixture of: cis-tetrahydro-2-isobutyl-4-methylpyran-4-ol;trans-tetrahydro-2-isobutyl-4-methylpyran-4-ol**	**-**	**405-040-6**
Route of exposure		Skin	
Species		Guinea pig	
Method		OECD 406	
Source		ECHA	
Evaluation		non-sensitizing	

3	(Z)-3-hexenyl salicylate	65405-77-8	265-745-8
Route of exposure		Skin	
Species		guinea pig	
Method		OECD 406	
Source		ECHA	
Evaluation		non-sensitizing	

Germ cell mutagenicity			
No	**Substance name**	**CAS no.**	**EC no.**
1	**ethanol**	**64-17-5**	**200-578-6**
Type of examination		in vitro gene mutation study in bacteria	
Species		Salmonella typhimurium	
Method		OECD 471	
Source		ECHA	
Evaluation/classification		Based on available data, the classification criteria are not met.	
Type of examination		in vitro gene mutation study in mammalian cells	
Species		mouse lymphoma cells	
Method		OECD 476	
Source		ECHA	
Evaluation/classification		Based on available data, the classification criteria are not met.	
Type of examination		Genotoxicity in vivo	
Species		mouse	
Method		OECD 478	
Source		ECHA	
Evaluation/classification		Based on available data, the classification criteria are not met.	
2	**(Z)-3-hexenyl salicylate**	**65405-77-8**	**265-745-8**
Method		OECD 476	
Source		ECHA	
Evaluation/classification		Based on available data, the classification criteria are not met.	

Reproduction toxicity			
No	**Substance name**	**CAS no.**	**EC no.**
1	**ethanol**	**64-17-5**	**200-578-6**
Route of exposure		oral	
NOAEL			
Type of examination		2 generation study	
Species		mouse	
Method		OECD 416	
Source		ECHA	
Evaluation/classification		Based on available data, the classification criteria are not met.	
Route of exposure		inhalational	
NOAEL		>= 20000 ppm	
Type of examination		Prenatal Developmental Toxicity Study	
Species		rat	
Method		OECD 414	
Source		ECHA	
Evaluation/classification		Based on available data, the classification criteria are not met.	
2	**(Z)-3-hexenyl salicylate**	**65405-77-8**	**265-745-8**
Method		OECD 422	
Source		ECHA	
Evaluation/classification		Based on available data, the classification criteria are not met.	

Carcinogenicity			
No	**Substance name**	**CAS no.**	**EC no.**
1	**ethanol**	**64-17-5**	**200-578-6**
Source		ECHA	
Evaluation/classification		Based on available data, the classification criteria are not met.	

STOT - single exposure
No data available

STOT - repeated exposure			
No	**Substance name**	**CAS no.**	**EC no.**

1	ethanol	64-17-5		200-578-6	
Route of exposure	oral				
Duration of exposure			14		week/s
Species	rat				
Target organ	kidneys				
Method	OECD 408				
Source	ECHA				
Evaluation/classification	Based on available data, the classification criteria are not met.				
2	**A mixture of: cis-tetrahydro-2-isobutyl-4-methylpyran-4-ol;trans-tetrahydro-2-isobutyl-4-methylpyran-4-ol**	**-**		**405-040-6**	
Route of exposure	oral				
NOAEL			125		mg/kg bw/d
Duration of exposure			4		week/s
Species	rat				
Method	OECD 407				
Source	ECHA				
Route of exposure	dermal				
NOAEL			1000		mg/kg bw/d
Species	rat				
Method	OECD 411				
Source	ECHA				
3	**(Z)-3-hexenyl salicylate**	**65405-77-8**		**265-745-8**	
Route of exposure	oral				
Species	rat				
Method	OECD 422				
Source	ECHA				
Evaluation/classification	Based on available data, the classification criteria are not met.				

Aspiration hazard
No data available

11.2 Information on other hazards

Endocrine disrupting properties
No data available.

Other information
No data available.

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish (acute)					
No	**Substance name**	**CAS no.**		**EC no.**	
1	**ethanol**	**64-17-5**		**200-578-6**	
LC50			14200		mg/l
Duration of exposure			96		h
Species	Pimephales promelas				
Method	EPA				
Source	ECHA				
2	**(Z)-3-hexenyl salicylate**	**65405-77-8**		**265-745-8**	
LC50		>	0,65		mg/l
Duration of exposure			96		h
Species	Oncorhynchus mykiss				
Method	OECD 203				
Source	ECHA				

Toxicity to fish (chronic)
No data available

Toxicity to Daphnia (acute)			
No	**Substance name**	**CAS no.**	**EC no.**

1	ethanol	64-17-5		200-578-6
EC50			5012	mg/l
Duration of exposure			48	h
Species		Ceriodaphnia dubia		
Method		ASTM Standard E 729-80		
Source		ECHA		
2	**(Z)-3-hexenyl salicylate**	**65405-77-8**		**265-745-8**
EC50			0,6	mg/l
Duration of exposure			48	h
Species		Daphnia magna		
Method		OECD 202		
Source		ECHA		
3	**4-methyl-3-decen-5-ol**	**81782-77-6**		**279-815-0**
EC50			0,4	mg/l
Duration of exposure			48	h
Species		Daphnia magna		
Method		OECD 202		
Source		ECHA		
Evaluation/classification		Based on available data, the classification criteria are met.		

Toxicity to Daphnia (chronic)				
No	**Substance name**	**CAS no.**		**EC no.**
1	**ethanol**	**64-17-5**		**200-578-6**
NOEC			9,6	mg/l
Duration of exposure			9	day(s)
Species		Daphnia magna		
Source		ECHA		

Toxicity to algae (acute)				
No	**Substance name**	**CAS no.**		**EC no.**
1	**ethanol**	**64-17-5**		**200-578-6**
EC50			275	mg/l
Duration of exposure			72	h
Species		Chlorella vulgaris		
Method		OECD 201		
Source		ECHA		
2	**(Z)-3-hexenyl salicylate**	**65405-77-8**		**265-745-8**
EC50			0,61	mg/l
Duration of exposure			72	h
Species		Desmodesmus subspicatus		
Method		OECD 201		
Source		ECHA		

Toxicity to algae (chronic)				
No	**Substance name**	**CAS no.**		**EC no.**
1	**4-methyl-3-decen-5-ol**	**81782-77-6**		**279-815-0**
EC50			3,6	mg/l
Duration of exposure			72	h
Species		Raphidocelis subcapitata		
Method		OECD 201		
Source		ECHA		
Evaluation/classification		Based on available data, the classification criteria are met.		

Bacteria toxicity				
No	**Substance name**	**CAS no.**		**EC no.**
1	**4-methyl-3-decen-5-ol**	**81782-77-6**		**279-815-0**
NOEC			100	mg/l
Duration of exposure			28	day(s)
Species		activated sludge		
Method		OECD 301 F		
Source		ECHA		

12.2 Persistence and degradability

Biodegradability					
No	**Substance name**	**CAS no.**			**EC no.**
1	**ethanol**	**64-17-5**			**200-578-6**
Type		aerobic biodegradation			
Value		appr.		84	%
Duration				20	day(s)
Source		ECHA			
Evaluation		readily biodegradable			
2	**A mixture of: cis-tetrahydro-2-isobutyl-4-methylpyran-4-ol;trans-tetrahydro-2-isobutyl-4-methylpyran-4-ol**	**-**			**405-040-6**
Type		aerobic biodegradation			
Value		0	-	10	%
Duration				28	day(s)
Evaluation		not readily biodegradable			
3	**(Z)-3-hexenyl salicylate**	**65405-77-8**			**265-745-8**
Type		aerobic biodegradation			
Value				89	%
Duration				28	day(s)
Method		OECD 301 F			
Source		ECHA			
Evaluation		readily biodegradable			
4	**4-methyl-3-decen-5-ol**	**81782-77-6**			**279-815-0**
Type		aerobic biodegradation			
Value				73	%
Duration				28	day(s)
Method		OECD 301 F			
Source		ECHA			
Evaluation		readily biodegradable			

12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log value)					
No	**Substance name**	**CAS no.**			**EC no.**
1	**ethanol**	**64-17-5**			**200-578-6**
log Pow				-0,35	
Reference temperature				24	°C
with reference to		pH 7,4			
Method		OECD 107			
Source		ECHA			
2	**A mixture of: cis-tetrahydro-2-isobutyl-4-methylpyran-4-ol;trans-tetrahydro-2-isobutyl-4-methylpyran-4-ol**	**-**			**405-040-6**
log Pow		appr.		1,65	
Reference temperature				23	°C
Method		EU Method A.8			
Source		ECHA			
3	**(Z)-3-hexenyl salicylate**	**65405-77-8**			**265-745-8**
log Pow				4,8	
Reference temperature				25	°C
Method		OECD 117			
Source		ECHA			
4	**4-methyl-3-decen-5-ol**	**81782-77-6**			**279-815-0**
log Pow				3,9	
Reference temperature				30	°C
with reference to		pH 7			
Method		OECD 117			
Source		ECHA			

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

Results of PBT and vPvB assessment	
PBT assessment	No data available.
vPvB assessment	No data available.

12.6 Endocrine disrupting properties
No data available.

12.7 Other adverse effects
No data available.

12.8 Other information

Other information
Do not discharge into drains or waters and do not dispose of in public landfills.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product
Disposal of the product should be carried out in accordance with all applicable regulations following consultation with the responsible local authority and the disposal company in an authorised and suitable disposal facility.
Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company.

Packaging
Residues must be removed from packaging and when emptied completely disposed of in accordance with the regulations for waste removal. Incompletely emptied packaging must be disposed of in the form of disposal specified by the regional disposer.

SECTION 14: Transport information

14.1 UN number or ID number

ADR/RID/ADN	UN1266
IMDG	UN1266
ICAO-TI / IATA	UN1266

14.2 UN proper shipping name

ADR/RID/ADN	PERFUMERY PRODUCTS
IMDG	PERFUMERY PRODUCTS
Technical name	1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1 one
ICAO-TI / IATA	Perfumery products

14.3 Transport hazard class(es)

ADR/RID/ADN - Class	3
Label	3
Classification code	F1
Tunnel restriction code	D/E
Hazard identification no.	33
Special Provision 640	640C
IMDG - Class	3
Label	3
ICAO-TI / IATA - Class	3
Label	3

14.4 Packing group

ADR/RID/ADN	II
IMDG	II
ICAO-TI / IATA	II

14.5 Environmental hazards

ADR/RID/ADN	Symbol "fish and tree"
IMDG	Symbol "fish and tree"
EmS	F-E, S-D

14.6 Special precautions for user
No data available.

14.7 Maritime transport in bulk according to IMO instruments
Not relevant

SECTION 15: Regulatory information

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

EU regulations

Regulation (EC) No 1907/2006 (REACH) Annex XIV (List of substances subject to authorisation)
According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substances considered as substances requiring authorisation as listed on Annex XIV of the REACH regulation (EC) 1907/2006.

REACH candidate list of substances of very high concern (SVHC) for authorisation
According to available data and the information provided by preliminary suppliers, the product does not contain substances that are considered substances meeting the criteria for inclusion in annex XIV (List of Substances Subject to Authorisation) as laid down in Article 57 and article 59 of REACH (EC) 1907/2006.

Regulation (EC) No 1907/2006 (REACH) Annex XVII: RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, MIXTURES AND ARTICLES

The product is considered being subject to REACH regulation (EC) 1907/2006 annex XVII. No 3, 40

The product contains following substance(s) that are considered being subject to REACH regulation (EC) 1907/2006 annex XVII.

No	Substance name	CAS no.	EC no.	No
1	(E)-2-methoxy-4-(prop-1-enyl)phenol	5932-68-3	227-678-2	75
2	(R)-p-mentha-1,8-diene	5989-27-5	227-813-5	75
3	A mixture of: cis-tetrahydro-2-isobutyl-4-methylpyran-4-ol;trans-tetrahydro-2-isobutyl-4-methylpyran-4-ol	-	405-040-6	75
4	geraniol	106-24-1	203-377-1	75
5	linalool	78-70-6	201-134-4	75

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances	
This product is subject to Part I of Annex I, risk category:	E2, P5b
If the properties of the substance/product give rise to more than one classification, for the purposes of 2012/18/UE, the lowest qualifying quantities set out in Part 1 and Part 2 of Annex I shall apply.	

Other regulations
Adhere to the national sanitary and occupational safety regulations when using this product.

15.2 Chemical safety assessment
A chemical safety assessment has not been carried out for this mixture.

SECTION 16: Other information

Sources of key data used to compile the data sheet:
Regulation (EC) No 1907/2006 (REACH), 1272/2008 (CLP) as amended in each case.
Directives 2000/39/EC, 2006/15/EC, 2009/161/EU, (EU) 2017/164.
National Threshold Limit Values of the corresponding countries as amended in each case.
Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.
The data sources used to determine physical, toxic and ecotoxic data, are indicated directly in the corresponding section.

Full text of the H- and EUH- phrases drawn up in sections 2 and 3 (provided not already drawn up in these sections)

H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.

H318	Causes serious eye damage.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Creation of the safety data sheet
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This information is based on our present knowledge and experience.
The safety data sheet describes products with a view to safety requirements.
It does not however, constitute a guarantee for any specific product properties and shall not establish a legally valid contractual relationship.

Alterations/supplements:
Alterations to the previous edition are marked in the left-hand margin.

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