Trade name: LINARI-ALBA

Current version : 4.0.1, issued: 21.10.2022 **Replaced version:** 4.0.0, issued: 26.05.2021 **Region:** GB

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

1.1 Product identifier

Trade name

LINARI-ALBA

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

Relevant identified uses of the substance or mixture
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

Emergency CONTACT (24-Hour-Number) international:
GBK GmbH - Global Regulatory Compliance +49 (0)6132-84463

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
[3R-(3α,3aβ,6β,7β,8aα)]-octahydro-6-methoxy-3,6,8,8-tetramethyl-1H-3a,7-methanoazulene

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 (R)-p-mentha-1,8-diene, 3-p-cumenyl-2-methylpropionaldehyde, alpha-methyl-1,3-benzodioxole-5-propionaldehyde, 1,2,3,5,6,7-hexahydro-1,1,2,3,3-pentamethyl-4H-inden-4-one, methyl oct-2-ynoate. 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.
P391	Collect spillage.
P501	Dispose of contents/container to a facility in accordance with local/regional/national/international regulations.

2.3 Other hazards

PBT assessment
The components of this product are not considered to be PBT (PBT = persistent, bioaccumulative, toxic) according to Annex XIII of Regulation (EC) 1907/2006 (REACH).

vPvB assessment
The components of this product are not considered to be vPvB (vPvB = very persistent, very bioaccumulative) according to Annex XIII of Regulation (EC) 1907/2006 (REACH).

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. 1B; H317 Skin Irrit. 2; H315	< 5.00	wt%
3	**[3R-(3α,3aβ,6β,7β,8aα)]-octahydro-6-methoxy-3,6,8,8-tetramethyl-1H-3a,7-methanoazulene**			
	19870-74-7 243-384-7 - -	Skin Sens. 1B; H317 Aquatic Acute 1; H400 Aquatic Chronic 2; H411	< 2.50	wt%
4	**1,4-dioxacyclohexadecane-5,16-dione**			
	54982-83-1 259-423-6 - 01-2119524000-64	Aquatic Acute 1; H400 Aquatic Chronic 3; H412	< 2.50	wt%

5	**(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%
6	**3-p-cumenyl-2-methylpropionaldehyde**			
	103-95-7 203-161-7 - -	Aquatic Chronic 3; H412 Skin Irrit. 2; H315 Skin Sens. 1B; H317	< 0.50	wt%
7	**alpha-methyl-1,3-benzodioxole-5-propionaldehyde**			
	1205-17-0 214-881-6 - 01-2120740119-58	Aquatic Chronic 2; H411 Skin Sens. 1B; H317 Repr. 2; H361	< 0.50	wt%
8	**1,2,3,5,6,7-hexahydro-1,1,2,3,3-pentamethyl-4H-inden-4-one**			
	33704-61-9 251-649-3 - -	Aquatic Chronic 2; H411 Skin Irrit. 2; H315 Skin Sens. 1B; H317 Eye Irrit. 2; H319	< 0.50	wt%
9	**methyl oct-2-ynoate**			
	111-12-6 203-836-6 - -	Acute Tox. 4; H302 Skin Sens. 1A; H317	< 0.10	wt%

Full Text for all H-phrases and EUH-phrases: pls. see section 16

No	Note	Specific concentration limits	M-factor (acute)	M-factor (chronic)
1	-	Eye Irrit. 2; H319: C >= 50%	-	-
5	-	-	M = 1	-

No	Route, target organ, concrete effect
7	H361 inhalational; -; -

SECTION 4: First aid measures

4.1 Description of first aid measures

General information
In case of persisting adverse effects, consult a physician.

After inhalation
Remove affected person from the immediate area. Ensure supply of fresh air. In case of persisting adverse effects consult a physician. If unconscious place in recovery position and seek medical advice.

After skin contact
In case of contact with skin wash off immediately with soap and water. Remove contaminated clothing. Consult a doctor if skin irritation persists.

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).

After ingestion
Rinse the mouth thoroughly with water. Do not induce vomiting. If swallowed drink plenty of water and seek medical treatment. 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
Foam; Extinguishing powder; Carbon dioxide; Water spray jet

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); Formation of explosive mixtures with air is possible.

5.3 Advice for firefighters

Use self-contained breathing apparatus. Wear protective clothing. Cool endangered containers with water spray jet. Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel
Exclude sources of ignition and ventilate the area. Avoid contact with skin, eyes and clothing. Refer to protective measures listed in sections 7 and 8.

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

6.2 Environmental precautions

Prevent spread over a wide area (e.g. by containment or oil barriers). Do not discharge into the drains/surface waters/groundwater. 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

See Section 13 for information on waste treatment. 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
Provide good ventilation at the work area (local exhaust ventilation, if necessary).

General protective and hygiene measures
Do not eat, drink or smoke during work time. Keep away from food, drink and animal feeding stuffs. After worktime and during work intervals the affected skin areas must be thoroughly cleaned. Avoid contact with eyes and skin. Remove soiled or soaked clothing immediately. Provide eye wash fountain in work area. Have emergency shower available.

Advice on protection against fire and explosion
Keep away from sources of heat and ignition. Take precautionary measures against static charges.

7.2 Conditions for safe storage, including any incompatibilities

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

Requirements for storage rooms and vessels
Store product in closed containers. Always keep in containers of same material as the original.

Incompatible products
Do not store together with fire promoting substances.

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 approved workplace exposure limits (WELs) / EH40		
	Ethanol		
	WEL long-term (8-hr TWA reference period)	1920 mg/m³	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	343	mg/kg/day
	inhalative	Long term (chronic)	systemic	950	mg/m³
2	**1,4-dioxacyclohexadecane-5,16-dione**			**54982-83-1 259-423-6**	
	dermal	Long term (chronic)	systemic	50	mg/kg bw/day
	inhalative	Long term (chronic)	systemic	176	mg/m³
3	**alpha-methyl-1,3-benzodioxole-5-propionaldehyde**			**1205-17-0 214-881-6**	
	dermal	Long term (chronic)	systemic	0.17	mg/kg bw/day
	dermal	Long term (chronic)	local	0.01	mg/cm²
	inhalative	Long term (chronic)	systemic	1.2	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**	
	oral	Long term (chronic)	systemic	87	mg/kg/day
	dermal	Long term (chronic)	systemic	206	mg/kg/day
	inhalative	Long term (chronic)	systemic	114	mg/m³
2	**1,4-dioxacyclohexadecane-5,16-dione**			**54982-83-1 259-423-6**	
	oral	Long term (chronic)	systemic	30	mg/kg bw/day
	dermal	Long term (chronic)	systemic	30	mg/kg bw/day
	inhalative	Long term (chronic)	systemic	52	mg/m³
3	**alpha-methyl-1,3-benzodioxole-5-propionaldehyde**			**1205-17-0 214-881-6**	
	oral	Long term (chronic)	systemic	0.17	mg/kg bw/day
	dermal	Long term (chronic)	systemic	0.083	mg/kg bw/day
	dermal	Long term (chronic)	local	0.005	mg/cm²
	inhalative	Long term (chronic)	systemic	0.29	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	Aqua intermittent	2.75	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	mg/kg food
2	**1,4-dioxacyclohexadecane-5,16-dione**		**54982-83-1 259-423-6**	
	water	fresh water	0.88	µg/L
	water	marine water	0.088	µg/L
	water	fresh water sediment	162	µg/kg dry weight
	water	marine water sediment	16.2	µg/kg dry weight
	soil	-	4.45	mg/kg dry weight
	sewage treatment plant	-	1.8	mg/L
3	**alpha-methyl-1,3-benzodioxole-5-propionaldehyde**		**1205-17-0 214-881-6**	
	water	fresh water	0.005	mg/L
	water	marine water	0.001	mg/L
	water	fresh water sediment	0.057	mg/kg dry weight
	water	marine water sediment	0.006	mg/kg dry weight
	soil	-	0.008	mg/kg dry weight
	sewage treatment plant	-	10	mg/L

8.2 Exposure controls

Appropriate engineering controls
Ensure adequate ventilation, local exhaust at the work station if necessary.

Personal protective equipment

Respiratory protection
If workplace exposure limits are exceeded, a respiration protection approved for this particular job must be worn. Combination filter (EN 14387), filter type A - brown; In case of aerosol, vapour and mist formation, take appropriate measures for breathing protection in the event workplace threshold values are not specified.

Eye / face protection
Tightly fitting safety glasses (EN 166).

Hand protection
In case of intensive contact, wear protective gloves (EN 374). 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.

Appropriate Material	butyl rubber		
Material thickness		0.7	mm
Breakthrough time	>	480	min

Other
Normal chemical work clothing.

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

Form

liquid

Colour
colourless

Odour
perfumed-like

pH value	
Value	6.1

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

Melting point/freezing point		
Value	-114	°C
Reference substance	Ethanol	

Decomposition temperature
No data available

Flash point		
Value	17	°C
Method	Pensky-Martens closed cup	

Ignition temperature
No data available

Auto-ignition temperature		
Value	425	°C
Reference substance	Ethanol	

Explosive properties
The product is not explosive. Formation of explosive/highly flammable air-vapour mixtures is possible during/after use.

Flammability
No data available

Lower explosion limit		
Value	3.5	% vol
Reference substance	Ethanol	

Upper explosion limit		
Value	15	% vol
Reference substance	Ethanol	

Vapour pressure		
Value	57	mbar
Reference temperature	20	°C
Reference substance	Ethanol	

Relative vapour density	
Comments	Air = 1
Comments	Heavier than air.

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	**1,4-dioxacyclohexadecane-5,16-dione**	**54982-83-1**	**259-423-6**
log Pow		3.65	
Reference temperature		20	°C
Method	OECD 107		
Source	ECHA		
3	**alpha-methyl-1,3-benzodioxole-5-propionaldehyde**	**1205-17-0**	**214-881-6**
log Pow		2.4	
Reference temperature		25	°C
Method	OECD 117		
Source	ECHA		

Kinematic viscosity
No data available

Particle characteristics

9.2 Other information

Other information
No data available.

SECTION 10: Stability and reactivity

10.1 Reactivity
No data available.

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. Generation of flammable vapor-air mixtures possible.

10.4 Conditions to avoid
Heat, naked flames and other ignition sources. Static discharges.

10.5 Incompatible materials
Reactions with strong oxidising agents. Reactions with strong acids. Alkali metals; Halogenated compounds

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			
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	**1,4-dioxacyclohexadecane-5,16-dione**	**54982-83-1**	**259-423-6**
LD50		4500	mg/kg bodyweight
Species	rat		
Method	OECD 401		
Source	ECHA		

3	alpha-methyl-1,3-benzodioxole-5-propionaldehyde	1205-17-0	214-881-6
LD50		3561	mg/kg bodyweight
Species	rat		
Method	OECD 401		
Source	ECHA		

Acute dermal toxicity			
No	**Substance name**	**CAS no.**	**EC no.**
1	**alpha-methyl-1,3-benzodioxole-5-propionaldehyde**	**1205-17-0**	**214-881-6**
LD50	>	2000	mg/kg bodyweight
Species	rabbit		
Method	OECD 402		
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	**1,4-dioxacyclohexadecane-5,16-dione**	**54982-83-1**	**259-423-6**
Duration of exposure		4	h
Species	rabbit		
Method	OECD 404		
Source	ECHA		
Evaluation	non-irritant		
3	**alpha-methyl-1,3-benzodioxole-5-propionaldehyde**	**1205-17-0**	**214-881-6**
Duration of exposure		4	h
Species	rabbit		
Method	OECD 404		
Source	ECHA		
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	**1,4-dioxacyclohexadecane-5,16-dione**	**54982-83-1**	**259-423-6**
Species	rabbit		
Method	EU B.5		
Source	ECHA		
Evaluation	non-irritant		
3	**alpha-methyl-1,3-benzodioxole-5-propionaldehyde**	**1205-17-0**	**214-881-6**
Species	rabbit		
Method	OECD 405		
Source	ECHA		

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	**1,4-dioxacyclohexadecane-5,16-dione**	**54982-83-1**	**259-423-6**
Route of exposure	Skin		
Species	guinea pig		
Method	OECD 406		
Source	ECHA		
Evaluation	non-sensitizing		
3	**alpha-methyl-1,3-benzodioxole-5-propionaldehyde**	**1205-17-0**	**214-881-6**
Route of exposure	Skin		
Species	mouse		
Method	OECD 429		
Source	ECHA		
Evaluation	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	**1,4-dioxacyclohexadecane-5,16-dione**	**54982-83-1**	**259-423-6**
Type of examination	in vitro gene mutation study in bacteria		
Species	S. typhimurium TA 1535, TA 1537, TA 98 and TA 100S. typhimurium TA 1535, TA 1537, TA 98, TA 100, TA 102		
Method	OECD 471		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		
3	**alpha-methyl-1,3-benzodioxole-5-propionaldehyde**	**1205-17-0**	**214-881-6**
Type of examination	in vitro gene mutation study in bacteria		
Species	S. typhimurium TA 1535, TA 1537, TA 98 and TA 100		
Method	OECD 471		
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.		

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.		

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	**1,4-dioxacyclohexadecane-5,16-dione**	**54982-83-1**		**259-423-6**
LC50		0.88		mg/l
Duration of exposure		96		h
Species	Oncorhynchus mykiss			
Method	OECD 203			
Source	ECHA			
3	**alpha-methyl-1,3-benzodioxole-5-propionaldehyde**	**1205-17-0**		**214-881-6**
LC50		5.3		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	**1,4-dioxacyclohexadecane-5,16-dione**	**54982-83-1**		**259-423-6**
EC50		>	14	mg/l
Duration of exposure			48	h
Species	Daphnia magna			
Method	OECD 202			
Source	ECHA			
3	**alpha-methyl-1,3-benzodioxole-5-propionaldehyde**	**1205-17-0**		**214-881-6**
EC50		8.3		mg/l
Duration of exposure		48		h
Species	Daphnia magna			
Method	OECD 202			
Source	ECHA			

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	**1,4-dioxacyclohexadecane-5,16-dione**	**54982-83-1**		**259-423-6**
EC50		17		mg/l
Duration of exposure		72		h
Species	Pseudokirchneriella subcapitata			
Method	OECD 201			
Source	ECHA			
3	**alpha-methyl-1,3-benzodioxole-5-propionaldehyde**	**1205-17-0**		**214-881-6**
EC50		28		mg/l
Duration of exposure		72		h
Species	Pseudokirchneriella subcapitata			
Method	OECD 201			
Source	ECHA			

Toxicity to algae (chronic)
No data available

Bacteria toxicity
No data available

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	**1,4-dioxacyclohexadecane-5,16-dione**	**54982-83-1**		**259-423-6**
Type	aerobic biodegradation			
Value		100	%	
Duration		28	day(s)	
Method	OECD 301 B			
Source	ECHA			
Evaluation	readily biodegradable			

12.3 Bioaccumulative potential

Bioconcentration factor (BCF)				
No	**Substance name**	**CAS no.**		**EC no.**
1	**1,4-dioxacyclohexadecane-5,16-dione**	**54982-83-1**		**259-423-6**
BCF		156		
Method	OECD 305			
Source	ECHA			

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	**1,4-dioxacyclohexadecane-5,16-dione**	**54982-83-1**		**259-423-6**
log Pow		3.65		
Reference temperature		20	°C	
Method	OECD 107			
Source	ECHA			
3	**alpha-methyl-1,3-benzodioxole-5-propionaldehyde**	**1205-17-0**		**214-881-6**
log Pow		2.4		
Reference temperature		25	°C	
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	The components of this product are not considered to be PBT (PBT = persistent, bioaccumulative, toxic) according to Annex XIII of Regulation (EC) 1907/2006 (REACH).
vPvB assessment	The components of this product are not considered to be vPvB (vPvB = very persistent, very bioaccumulative) according to Annex XIII of Regulation (EC) 1907/2006 (REACH).

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 product unmonitored into the environment.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product
In accordance with regulations for special waste, must be taken to a special waste disposal.

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 Transport ADR/RID/ADN

Class	3
Classification code	F1
Packing group	II
Hazard identification no.	33
UN number	UN1266
Proper shipping name	PERFUMERY PRODUCTS
Special Provision 640	640D
Tunnel restriction code	D/E
Label	3
Environmentally hazardous substance mark	Symbol "fish and tree"

14.2 Transport IMDG

Class	3
Packing group	II
UN number	UN1266
Proper shipping name	PERFUMERY PRODUCTS
EmS	F-E, S-D
Label	3
Marine pollutant mark	Symbol "fish and tree"

14.3 Transport ICAO-TI / IATA

Class	3
Packing group	II
UN number	UN1266
Proper shipping name	Perfumery products
Label	3

14.4 Other information

No data available.

14.5 Environmental hazards

Information on environmental hazards, if relevant, please see 14.1 - 14.3.

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	**(R)-p-mentha-1,8-diene**	**5989-27-5**	**227-813-5**	**75**
2	**2-ethyl-N-methyl-N-(3-methylphenyl)butanamide**	**406488-30-0**	**446-190-2**	**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.	

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.
H315	Causes skin irritation.
H361	Suspected of damaging fertility or the unborn child.
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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