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Safety data sheet according to Regulation (EC) No 1907/2006, Annex II (last amended by Regulation (EU) 2020/878)
Revision date / version: 24.02.2026 / 0005
Replacing version dated / version: 06.10.2025 / 0004
Valid from: 24.02.2026
PDF print date: 24.02.2026
Duftstoff Fresh Cotton
Art.: 217999

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II (last amended by Regulation (EU) 2020/878)

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

1.1 Product identifier

Duftstoff Fresh Cotton
Art.: 217999

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

Relevant identified uses of the substance or mixture:
perfumes

Uses advised against:
No information available at present.

1.3 Details of the supplier of the safety data sheet

Koch-Chemie GmbH
Einsteinstrasse 42
59423 Unna
Telefon: +49 (0) 2303 / 9 86 70 - 0
Fax: +49 (0) 2303 / 9 86 70 - 26
info@koch-chemie.com
www.koch-chemie.com

Qualified person's e-mail address: info@chemical-check.de, k.schnurbusch@chemical-check.de Please DO NOT use for requesting Safety Data Sheets.

1.4 Emergency telephone number

Emergency information services / official advisory body:
IRL

National Poisons Information Centre, Beaumont Hospital, Dublin 9, Ireland, Tel.:
+353 (0)1 809 2166 (Public Poisons Info Line, 8am-10pm, 7 days a week)
+353 (0)1 809 2566 (Info for Healthcare Professionals ONLY, 24 h, 7 days a week)

Telephone number of the company in case of emergencies:
+1 872 5888271 (KCC)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) 1272/2008 (CLP)

Hazard class	Hazard category	Hazard statement
Eye Irrit.	2	H319-Causes serious eye irritation.
Skin Irrit.	2	H315-Causes skin irritation.
Skin Sens.	1	H317-May cause an allergic skin reaction.
Aquatic Acute	1	H400-Very toxic to aquatic life.
Aquatic Chronic	2	H411-Toxic to aquatic life with long lasting effects.

2.2 Label elements
Labeling according to Regulation (EC) 1272/2008 (CLP)

Warning

H319-Causes serious eye irritation. H315-Causes skin irritation. H317-May cause an allergic skin reaction. H410-Very toxic to aquatic life with long lasting effects.

P261-Avoid breathing vapours or spray. P273-Avoid release to the environment. P280-Wear protective gloves / eye protection / face protection.
P314-Get medical advice / attention if you feel unwell.

(R)-p-mentha-1,8-diene
Linalool
Pentadecan-15-olide
4-tert-butylcyclohexyl acetate
Dodecanal
3,7-dimethyloctan-3-ol
(2E)-2-benzylideneoctanal
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one
2,4-dimethylcyclohex-3-ene-1-carbaldehyde
Reaction mass of isopentyl salicylate and 2-methylbutyl salicylate

2.3 Other hazards
The mixture does not contain any vPvB substance (vPvB = very persistent, very bioaccumulative) or is not included under XIII of the regulation (EC) 1907/2006 (< 0,1 %).
The mixture does not contain any PBT substance (PBT = persistent, bioaccumulative, toxic) or is not included under XIII of the regulation (EC) 1907/2006 (< 0,1 %).
The mixture does not contain any substance with endocrine disrupting properties (< 0,1 %).

SECTION 3: Composition/information on ingredients

3.1 Substances
n.a.
3.2 Mixtures

3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-indenyl propionate	
Registration number (REACH)	01-2119969447-21-XXXX
Index	---
EINECS, ELINCS, NLP, REACH-IT List-No.	272-805-7
CAS	68912-13-0
content %	5-<10
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Aquatic Chronic 2, H411

4-tert-butylcyclohexyl acetate	

Registration number (REACH)	01-2119976286-24-XXXX
Index	---
EINECS, ELINCS, NLP, REACH-IT List-No.	250-954-9
CAS	32210-23-4
content %	5-<10
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Skin Sens. 1B, H317

2,6-dimethyloct-7-en-2-ol	
Registration number (REACH)	01-2119457274-37-XXXX
Index	---
EINECS, ELINCS, NLP, REACH-IT List-No.	242-362-4
CAS	18479-58-8
content %	5-<10
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H336

(2E)-2-benzylideneoctanal	
Registration number (REACH)	01-2119533092-50-XXXX
Index	---
EINECS, ELINCS, NLP, REACH-IT List-No.	639-566-4
CAS	165184-98-5
content %	1-<10
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Skin Sens. 1, H317 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 2, H411

Cis-2-tert-butylcyclohexyl acetate	
Registration number (REACH)	01-2119970713-33-XXXX
Index	---
EINECS, ELINCS, NLP, REACH-IT List-No.	243-718-1
CAS	20298-69-5
content %	3-<5
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Aquatic Chronic 2, H411

Terpineol	
Registration number (REACH)	01-2119553062-49-XXXX
Index	---
EINECS, ELINCS, NLP, REACH-IT List-No.	232-268-1
CAS	8000-41-7
content %	3-<5
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Skin Irrit. 2, H315 Eye Irrit. 2, H319

1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	
Registration number (REACH)	---
Index	---
EINECS, ELINCS, NLP, REACH-IT List-No.	259-174-3
CAS	54464-57-2
content %	3-<5
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Skin Irrit. 2, H315 Skin Sens. 1B, H317 Aquatic Chronic 2, H411

(R)-p-mentha-1,8-diene	
Registration number (REACH)	01-2119529223-47-XXXX

Index	601-096-00-2
EINECS, ELINCS, NLP, REACH-IT List-No.	227-813-5
CAS	5989-27-5
content %	3-<5
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1B, H317 Asp. Tox. 1, H304 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 3, H412

Diphenyl ether	**Substance for which an EU exposure limit value applies.**
Registration number (REACH)	01-2119472545-33-XXXX
Index	---
EINECS, ELINCS, NLP, REACH-IT List-No.	202-981-2
CAS	101-84-8
content %	1-<3
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Eye Irrit. 2, H319 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 3, H412

Reaction mass of: (E)-oxacyclohexadec-12- en-2-one, (E)-oxacyclohexadec-13-en-2- one, a) (Z)-oxacyclohexadec-(12)-en-2-one and b) (Z)-oxacyclohexadec-(13)-en-2-one	
Registration number (REACH)	01-0000016883-62-XXXX
Index	606-092-00-4
EINECS, ELINCS, NLP, REACH-IT List-No.	422-320-3
CAS	34902-57-3 (111879-80-2)
content %	1-<3
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1)

Tetrahydro-2-isobutyl-4-methylpyran-4-ol, mixed isomers (cis and trans)	
Registration number (REACH)	01-0000015458-64-XXXX
Index	603-101-00-3
EINECS, ELINCS, NLP, REACH-IT List-No.	405-040-6
CAS	63500-71-0
content %	1-<3
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Eye Irrit. 2, H319

Ionone, methyl-	
Registration number (REACH)	01-2119471851-35-XXXX
Index	---
EINECS, ELINCS, NLP, REACH-IT List-No.	215-635-0
CAS	1335-46-2
content %	1-<3
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Chronic 2, H411

Undecan-4-olide	
Registration number (REACH)	---
Index	---
EINECS, ELINCS, NLP, REACH-IT List-No.	203-225-4
CAS	104-67-6
content %	1-<3

Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Aquatic Chronic 3, H412

3-methyl-5-phenylpentanol	
Registration number (REACH)	---
Index	---
EINECS, ELINCS, NLP, REACH-IT List-No.	259-461-3
CAS	55066-48-3
content %	1-<3
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Acute Tox. 4, H302 STOT RE 2, H373
Specific Concentration Limits and ATE	ATE (oral): 500 mg/kg

Benzyl acetate	
Registration number (REACH)	01-2119638272-42-XXXX
Index	---
EINECS, ELINCS, NLP, REACH-IT List-No.	205-399-7
CAS	140-11-4
content %	1-<3
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Aquatic Chronic 3, H412

Methyl 2-naphthyl ether	
Registration number (REACH)	---
Index	---
EINECS, ELINCS, NLP, REACH-IT List-No.	202-213-6
CAS	93-04-9
content %	1-<3
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Eye Irrit. 2, H319 Aquatic Chronic 2, H411

2-ethyl-4-(2,2,3-trimethyl-3-cyclopenten-1-yl)-2-buten-1-ol	
Registration number (REACH)	---
Index	---
EINECS, ELINCS, NLP, REACH-IT List-No.	248-908-8
CAS	28219-61-6
content %	1-<3
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Eye Irrit. 2, H319 Aquatic Chronic 2, H411

3,7-dimethyloctan-3-ol	
Registration number (REACH)	01-2119454788-21-XXXX
Index	---
EINECS, ELINCS, NLP, REACH-IT List-No.	201-133-9
CAS	78-69-3
content %	1-<3
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1B, H317

Anisaldehyde	
Registration number (REACH)	---
Index	---
EINECS, ELINCS, NLP, REACH-IT List-No.	204-602-6
CAS	123-11-5
content %	1-<3
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Aquatic Chronic 3, H412

1-(5,6,7,8-Tetrahydro-3,5,5,6,8,8-hexamethyl-2-naphthyl)ethan-1-one	
Registration number (REACH)	01-2119539433-40-XXXX
Index	---
EINECS, ELINCS, NLP, REACH-IT List-No.	216-133-4
CAS	1506-02-1
content %	<1
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Acute Tox. 4, H302 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1)
Specific Concentration Limits and ATE	ATE (oral): 570 mg/kg

[3R-(3.alpha.,3a.beta.,7.beta.,8a.alpha.)]-2,3,4,7,8,8a-hexahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulene	
Registration number (REACH)	---
Index	---
EINECS, ELINCS, NLP, REACH-IT List-No.	207-418-4
CAS	469-61-4
content %	<1
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Asp. Tox. 1, H304 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=10)

Pentadecan-15-olide	
Registration number (REACH)	01-2119987323-31-XXXX
Index	---
EINECS, ELINCS, NLP, REACH-IT List-No.	203-354-6
CAS	106-02-5
content %	<1
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Skin Sens. 1B, H317 Aquatic Chronic 2, H411

Dodecanal	
Registration number (REACH)	---
Index	---
EINECS, ELINCS, NLP, REACH-IT List-No.	203-983-6
CAS	112-54-9
content %	<1
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 4, H413

4-methyl-3-decen-5-ol	
Registration number (REACH)	---
Index	---
EINECS, ELINCS, NLP, REACH-IT List-No.	279-815-0
CAS	81782-77-6
content %	<1
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Aquatic Acute 1, H400 (M=1) Aquatic Chronic 2, H411

2,4-dimethylcyclohex-3-ene-1-carbaldehyde	
Registration number (REACH)	---
Index	605-043-00-4
EINECS, ELINCS, NLP, REACH-IT List-No.	268-264-1
CAS	68039-49-6
content %	<1

Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 2, H411

Reaction mass of isopentyl salicylate and 2-methylbutyl salicylate	
Registration number (REACH)	01-2120809315-60-XXXX
Index	---
EINECS, ELINCS, NLP, REACH-IT List-No.	904-908-6
CAS	---
content %	<1
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Skin Sens. 1, H317 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 3, H412

Linalool	
Registration number (REACH)	01-2119474016-42-XXXX
Index	603-235-00-2
EINECS, ELINCS, NLP, REACH-IT List-No.	201-134-4
CAS	78-70-6
content %	<1
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1B, H317

For the text of the H-phrases and classification codes (GHS/CLP), see Section 16.
The substances named in this section are given with their actual, appropriate classification!
For substances that are listed in appendix VI, table 3.1 of the regulation (EC) no. 1272/2008 (CLP regulation) this means that all notes that may be given here for the named classification have been taken into account.
The addition of the highest concentrations listed here can result in a classification. Only when this classification is listed in Section 2 does it apply. In all other cases the total concentration is below the classification.

SECTION 4: First aid measures

4.1 Description of first aid measures
First-aiders should ensure they are protected!
Never pour anything into the mouth of an unconscious person!

Inhalation
Remove person from danger area.
Supply person with fresh air and consult doctor according to symptoms.

Skin contact
Remove polluted, soaked clothing immediately, wash thoroughly with plenty of water and soap, in case of irritation of the skin (flare), consult a doctor.

Eye contact
Remove contact lenses.
Wash thoroughly for several minutes using copious water. Seek medical help if necessary.

Ingestion
Rinse the mouth thoroughly with water.
Do not induce vomiting - give copious water to drink. Consult doctor immediately.

4.2 Most important symptoms and effects, both acute and delayed
If applicable delayed symptoms and effects can be found in section 11 and the absorption route in section 4.1.
In certain cases, the symptoms of poisoning may only appear after an extended period / after several hours.
eyes, reddened
watering eyes
reddening of the skin
Dermatitis (skin inflammation)
Allergic reaction

4.3 Indication of any immediate medical attention and special treatment needed

Symptomatic treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media
Suitable extinguishing media
Water jet spray / alcohol resistant foam / CO2 / dry extinguisher.
Unsuitable extinguishing media
High volume water jet
5.2 Special hazards arising from the substance or mixture
In case of fire the following can develop:
Oxides of carbon
Toxic gases
5.3 Advice for firefighters
For personal protective equipment see Section 8.
In case of fire and/or explosion do not breathe fumes.
Protective respirator with independent air supply.
According to size of fire
Full protection, if necessary.
Cool container at risk with water.
Dispose of contaminated extinction water according to official regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
6.1.1 For non-emergency personnel
In case of spillage or accidental release, wear personal protective equipment as specified in section 8 to prevent contamination.
Ensure sufficient ventilation, remove sources of ignition.
Avoid dust formation with solid or powder products.
Leave the danger zone if possible, use existing emergency plans if necessary.
Avoid contact with eyes or skin.
If applicable, caution - risk of slipping.
6.1.2 For emergency responders
See section 8 for suitable protective equipment and material specifications.
6.2 Environmental precautions
If leakage occurs, dam up.
Resolve leaks if this possible without risk.
Prevent surface and ground-water infiltration, as well as ground penetration.
Prevent from entering drainage system.
If accidental entry into drainage system occurs, inform responsible authorities.
6.3 Methods and material for containment and cleaning up
Soak up with absorbent material (e.g. universal binding agent, sand, diatomaceous earth) and dispose of according to Section 13.
Fill the absorbed material into lockable containers.
6.4 Reference to other sections
For personal protective equipment see Section 8 and for disposal instructions see Section 13.

SECTION 7: Handling and storage

In addition to information given in this section, relevant information can also be found in section 8 and 6.1.
7.1 Precautions for safe handling
7.1.1 General recommendations
Ensure good ventilation.
Avoid contact with eyes or skin.
Do not heat to temperatures close to flash point.
Eating, drinking, smoking, as well as food-storage, is prohibited in work-room.
Observe directions on label and instructions for use.

Use working methods according to operating instructions.

7.1.2 Notes on general hygiene measures at the workplace

General hygiene measures for the handling of chemicals are applicable.
Wash hands before breaks and at end of work.
Keep away from food, drink and animal feedingstuffs.
Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

7.2 Conditions for safe storage, including any incompatibilities

Keep out of access to unauthorised individuals.
Store product closed and only in original packing.
Not to be stored in gangways or stair wells.
Do not store with oxidizing agents.
Under all circumstances prevent penetration into the soil.
Store in a well-ventilated place.
Store cool.

7.3 Specific end use(s)

No information available at present.
Observe the instructions for good working practice and the recommendations for risk assessment.
Consult hazardous substance information systems, e.g. from the professional associations, the chemical industry or different industries,
depending on the application (building materials, wood, chemistry, laboratory, leather, metal).

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

GB **Chemical Name**	Diphenyl ether	
WEL-TWA: 1 ppm (7 mg/m3) (WEL-TWA, EU)	WEL-STEL: 2 ppm (14 mg/m3) (WEL-STEL, EU)	---
Monitoring procedures:	---	
BMGV: ---	Other information: ---	

IRL **Chemical Name**	Diphenyl ether	
OELV-8h: 1 ppm (7 mg/m3) (OELV-8h, EU)	OELV-15min: 2 ppm (14 mg/m3) (OELV-15min, EU)	---
Monitoring procedures:	---	
BLV: ---	Other information: IOELV	

M **Chemical Name**	Diphenyl ether	
OELV-8h: 1 ppm (7 mg/m3) (OELV-8h, EU)	OELV-ST: 2 ppm (14 mg/m3) (OELV-ST, EU)	---
Monitoring procedures:	---	
BMGV: ---	Other information: ---	

IRL **Chemical Name**	Benzyl acetate	
OELV-8h: 10 ppm	OELV-15min: ---	---
Monitoring procedures:	---	
BLV: ---	Other information: ---	

3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-indenyl propionate

Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
	Environment - freshwater		PNEC	91	µg/l	
	Environment - marine		PNEC	9,1	µg/l	
	Environment - sewage treatment plant		PNEC	4,8	mg/l	
	Environment - sediment, freshwater		PNEC	12,2	mg/kg	
	Environment - sediment, marine		PNEC	1,22	mg/kg	
	Environment - soil		PNEC	4,4	mg/kg	

(2E)-2-benzylideneoctanal						
Area of application	**Exposure route / Environmental compartment**	**Effect on health**	**Descriptor**	**Value**	**Unit**	**Note**
	Environment - freshwater		PNEC	3	mg/l	
	Environment - marine		PNEC	0,003	mg/l	
	Environment - sewage treatment plant		PNEC	10	mg/l	
	Environment - sediment, freshwater		PNEC	4,7	mg/kg	
	Environment - sediment, marine		PNEC	4,77	mg/kg	
	Environment - freshwater		PNEC	0,00126	mg/l	
	Environment - marine		PNEC	0,000126	mg/l	
	Environment - sediment, freshwater		PNEC	3,2	mg/kg dw	
	Environment - sediment, marine		PNEC	0,064	mg/kg dw	
	Environment - soil		PNEC	0,398	mg/kg dw	
	Environment - oral (animal feed)		PNEC	6,6	mg/kg	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	0,019	mg/m3	
Consumer	Human - inhalation	Short term, local effects	DNEL	4,7	mg/m3	
Consumer	Human - dermal	Long term, systemic effects	DNEL	9	mg/kg body weight/day	
Consumer	Human - dermal	Long term, local effects	DNEL	0,079	mg/cm2	
Consumer	Human - dermal	Short term, local effects	DNEL	0,079	mg/cm2	
Consumer	Human - oral	Long term, systemic effects	DNEL	0,056	mg/kg body weight/day	
Workers / employees	Human - dermal	Short term, local effects	DNEL	0,525	mg/cm2	
Workers / employees	Human - inhalation	Short term, local effects	DNEL	6,28	mg/m3	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	18,2	mg/kg body weight/day	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	0,078	mg/m3	
Workers / employees	Human - dermal	Long term, local effects	DNEL	0,525	mg/cm2	

4-tert-butylcyclohexyl acetate						
Area of application	**Exposure route / Environmental compartment**	**Effect on health**	**Descriptor**	**Value**	**Unit**	**Note**
	Environment - freshwater		PNEC	0,0053	mg/l	
	Environment - marine		PNEC	0,00053	mg/l	
	Environment - water, sporadic (intermittent) release		PNEC	0,053	mg/l	

	Environment - sediment, freshwater		PNEC	2,01	mg/kg	
	Environment - sediment, marine		PNEC	0,21	mg/kg	
	Environment - soil		PNEC	0,42	mg/kg	
Consumer	Human - oral	Long term, systemic effects	DNEL	62500	mg/kg	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	0,11	mg/m3	
Consumer	Human - dermal	Long term, systemic effects	DNEL	0,625	mg/kg bw/day	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	1,25	mg/kg bw/day	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	0,44	mg/m3	

2,6-dimethyloct-7-en-2-ol

Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
	Environment - freshwater		PNEC	0,0278	mg/l	
	Environment - marine		PNEC	0,00278	mg/l	
	Environment - sediment, freshwater		PNEC	0,594	mg/kg dry weight	
	Environment - sediment, marine		PNEC	0,059	mg/kg dry weight	
	Environment - sewage treatment plant		PNEC	10	mg/l	
	Environment - soil		PNEC	0,103	mg/kg dry weight	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	2,5	mg/kg body weight/day	
Consumer	Human - dermal	Long term, systemic effects	DNEL	2,5	mg/kg body weight/day	
Consumer	Human - dermal	Long term, systemic effects	DNEL	4,35	mg/m3	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	24,7	mg/m3	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	7	mg/kg body weight/day	

Cis-2-tert-butylcyclohexyl acetate

Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
	Environment - freshwater		PNEC	0,011	mg/l	
	Environment - marine		PNEC	0,0011	mg/l	
	Environment - sewage treatment plant		PNEC	10	mg/l	
	Environment - sediment, freshwater		PNEC	1,5	mg/kg dw	
	Environment - sediment, marine		PNEC	0,15	mg/kg dw	
	Environment - soil		PNEC	0,293	mg/kg dw	

Terpineol						
Area of application	**Exposure route / Environmental compartment**	**Effect on health**	**Descriptor**	**Value**	**Unit**	**Note**
	Environment - sewage treatment plant		PNEC	2,57	mg/l	
	Environment - soil		PNEC	0,045	mg/kg dry weight	
	Environment - oral (animal feed)		PNEC	16,6	g/kg feed	
	Environment - freshwater		PNEC	0,012	mg/l	
	Environment - marine		PNEC	0,0012	mg/l	
	Environment - sediment, freshwater		PNEC	0,263	mg/kg dry weight	
	Environment - sediment, marine		PNEC	0,026	mg/kg dry weight	
Consumer	Human - oral	Short term, systemic effects	DNEL	2,5	mg/kg	
Consumer	Human - dermal	Short term, systemic effects	DNEL	2,5	mg/kg	
Consumer	Human - inhalation	Short term, systemic effects	DNEL	1,25	mg/kg	
Consumer	Human - oral	Long term, systemic effects	DNEL	2,69	mg/kg bw/day	
Consumer	Human - dermal	Long term, systemic effects	DNEL	2,69	mg/kg bw/day	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	7,96	mg/m3	
Workers / employees	Human - dermal	Short term, systemic effects	DNEL	5	mg/kg	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	6,36	mg/kg bw/day	
Workers / employees	Human - inhalation	Short term, systemic effects	DNEL	5,8	mg/m3	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	44,8	mg/m3	

1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one						
Area of application	**Exposure route / Environmental compartment**	**Effect on health**	**Descriptor**	**Value**	**Unit**	**Note**
	Environment - freshwater		PNEC	4,4	µg/l	
	Environment - marine		PNEC	0,44	µg/l	
	Environment - sewage treatment plant		PNEC	10	mg/l	
	Environment - sediment, freshwater		PNEC	3,73	mg/kg	
	Environment - sediment, marine		PNEC	0,75	mg/kg	
	Environment - soil		PNEC	2,7	mg/kg	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	30	mg/m3	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	28,7	mg/kg bw/day	
Workers / employees	Human - dermal	Long term, local effects	DNEL	0,648	mg/cm2	

(R)-p-mentha-1,8-diene

Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
	Environment - freshwater		PNEC	14	µg/l	
	Environment - marine		PNEC	1,4	µg/l	
	Environment - sewage treatment plant		PNEC	1,8	mg/l	
	Environment - sediment, freshwater		PNEC	3,85	mg/kg dry weight	
	Environment - sediment, marine		PNEC	0,3851	mg/kg dry weight	
	Environment - soil		PNEC	0,763	mg/kg dry weight	
	Environment - oral (animal feed)		PNEC	133	mg/kg	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	66,7	mg/m3	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	9,5	mg/kg body weight/day	

Diphenyl ether						
Area of application	**Exposure route / Environmental compartment**	**Effect on health**	**Descriptor**	**Value**	**Unit**	**Note**
	Environment - freshwater		PNEC	0	mg/l	
	Environment - marine		PNEC	0	mg/l	
	Environment - sewage treatment plant		PNEC	10	mg/l	
	Environment - sediment, freshwater		PNEC	0,093	mg/kg	
	Environment - sediment, marine		PNEC	0,009	mg/kg	
	Environment - soil		PNEC	0,018	mg/kg	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	59	mg/m3	
Workers / employees	Human - inhalation	Long term, local effects	DNEL	7	mg/m3	
Workers / employees	Human - inhalation	Short term, local effects	DNEL	14	mg/m3	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	25	mg/kg bw/d	

Reaction mass of: (E)-oxacyclohexadec-12- en-2-one, (E)-oxacyclohexadec-13-en-2- one, a) (Z)-oxacyclohexadec-(12)-en-2-one and b) (Z)-oxacyclohexadec-(13)-en-2-one						
Area of application	**Exposure route / Environmental compartment**	**Effect on health**	**Descriptor**	**Value**	**Unit**	**Note**
	Environment - freshwater		PNEC	2,7	µg/l	
	Environment - marine		PNEC	0,27	µg/l	
	Environment - sewage treatment plant		PNEC	10	mg/l	
	Environment - sediment, freshwater		PNEC	21	mg/kg	
	Environment - sediment, marine		PNEC	4,2	mg/kg	
	Environment - soil		PNEC	5,44	mg/kg	

Tetrahydro-2-isobutyl-4-methylpyran-4-ol, mixed isomers (cis and trans)						
Area of application	**Exposure route / Environmental compartment**	**Effect on health**	**Descriptor**	**Value**	**Unit**	**Note**
	Environment - marine		PNEC	0,0094	mg/l	
	Environment - oral (animal feed)		PNEC	0,94	mg/l	
	Environment - sediment, freshwater		PNEC	0,412	mg/kg	
	Environment - sediment, marine		PNEC	0,0412	mg/kg	
	Environment - soil		PNEC	0,0902	mg/kg	
	Environment - sewage treatment plant		PNEC	10	mg/l	
	Environment - freshwater		PNEC	0,094	mg/l	
	Environment - periodic release		PNEC	0,94	mg/l	
Consumer	Human - dermal	Long term, systemic effects	DNEL	25	mg/kg bw/day	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	13	mg/m3	
Consumer	Human - oral	Long term, systemic effects	DNEL	7,5	mg/kg body weight/day	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	41,7	mg/kg body weight/day	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	44,1	mg/m3	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	3,9	mg/kg bw/day	

Ionone, methyl-						
Area of application	**Exposure route / Environmental compartment**	**Effect on health**	**Descriptor**	**Value**	**Unit**	**Note**
	Environment - freshwater		PNEC	0,002	mg/l	
	Environment - marine		PNEC	0	mg/l	
	Environment - sewage treatment plant		PNEC	10	mg/l	
	Environment - sediment, freshwater		PNEC	0,246	mg/kg	
	Environment - sediment, marine		PNEC	0,025	mg/kg	
	Environment - soil		PNEC	0,048	mg/kg	
Consumer	Human - oral	Long term, systemic effects	DNEL	2,5	mg/kg bw/day	
Consumer	Human - dermal	Long term, systemic effects	DNEL	5	mg/kg bw/day	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	8,7	mg/m3	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	29,4	mg/m3	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	8,33	mg/kg bw/day	
Workers / employees	Human - dermal	Long term, local effects	DNEL	8,33	mg/kg bw/day	

Undecan-4-olide						
Area of application	**Exposure route / Environmental compartment**	**Effect on health**	**Descriptor**	**Value**	**Unit**	**Note**
	Environment - freshwater		PNEC	5,85	µg/l	
	Environment - marine		PNEC	0,585	µg/l	
	Environment - periodic release		PNEC	0,0585	mg/l	
	Environment - sediment, freshwater		PNEC	0,628	mg/kg	
	Environment - sediment, marine		PNEC	0,063	mg/kg	
	Environment - sewage treatment plant		PNEC	80	mg/l	
	Environment - soil		PNEC	0,122	mg/kg	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	4,68	mg/m3	
Consumer	Human - dermal	Long term, systemic effects	DNEL	2,7	mg/kg bw/d	
Consumer	Human - oral	Long term, systemic effects	DNEL	2,7	mg/kg bw/d	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	19	mg/m3	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	5,38	mg/kg bw/d	

3-methyl-5-phenylpentanol						
Area of application	**Exposure route / Environmental compartment**	**Effect on health**	**Descriptor**	**Value**	**Unit**	**Note**
	Environment - freshwater		PNEC	0,013	mg/l	
	Environment - marine		PNEC	0,001	mg/l	
	Environment - sediment, freshwater		PNEC	1,034	mg/kg	
	Environment - sediment, marine		PNEC	0,103	mg/kg	
	Environment - soil		PNEC	0,199	mg/kg	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	0,88	mg/m3	
Workers / employees	Human - inhalation	Short term, systemic effects	DNEL	5,3	mg/m3	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	0,5	mg/kg bw/d	
Workers / employees	Human - dermal	Short term, systemic effects	DNEL	3	mg/kg bw/d	

Benzyl acetate						
Area of application	**Exposure route / Environmental compartment**	**Effect on health**	**Descriptor**	**Value**	**Unit**	**Note**
	Environment - freshwater		PNEC	0,004	mg/l	
	Environment - marine		PNEC	0,0004	mg/l	
	Environment - periodic release		PNEC	0,04	mg/l	
	Environment - sewage treatment plant		PNEC	8,55	mg/l	
	Environment - sediment, freshwater		PNEC	0,114	mg/kg	

	Environment - sediment, marine		PNEC	0,0114	mg/kg	
	Environment - soil		PNEC	0,0205	mg/kg	
Consumer	Human - oral	Short term, systemic effects	DNEL	6,25	mg/kg bw/day	
Consumer	Human - dermal	Short term, systemic effects	DNEL	6,25	mg/kg bw/day	
Consumer	Human - inhalation	Short term, systemic effects	DNEL	11	mg/m3	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	5,5	mg/m3	
Consumer	Human - dermal	Long term, systemic effects	DNEL	2,5	mg/kg bw/day	
Consumer	Human - oral	Long term, systemic effects	DNEL	3,125	mg/kg bw/day	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	9	mg/m3	
Workers / employees	Human - inhalation	Short term, systemic effects	DNEL	43,8	mg/m3	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	6,25	mg/kg bw/day	
Workers / employees	Human - dermal	Short term, systemic effects	DNEL	12,5	mg/kg bw/day	

Methyl 2-naphthyl ether

Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
	Environment - freshwater		PNEC	10,9	µg/l	
	Environment - marine		PNEC	1,09	µg/l	
	Environment - sewage treatment plant		PNEC	1,7	mg/l	
	Environment - sediment, freshwater		PNEC	2,12	mg/kg	
	Environment - sediment, marine		PNEC	0,212	mg/kg	
	Environment - soil		PNEC	0,0036	mg/kg	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	6,17	mg/m3	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	1,75	mg/kg bw/d	

2-ethyl-4-(2,2,3-trimethyl-3-cyclopenten-1-yl)-2-buten-1-ol

Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
	Environment - freshwater		PNEC	0,63	µg/l	
	Environment - marine		PNEC	0,063	µg/l	
	Environment - sediment, freshwater		PNEC	0,04379	mg/kg dry weight	
	Environment - sediment, marine		PNEC	0,004379	mg/kg wwt	
	Environment - soil		PNEC	0,00839	mg/kg	
Workers / employees	Human - oral	Short term, systemic effects	DNEL	3	mg/kg body weight/day	

Workers / employees	Human - oral	Long term, systemic effects	DNEL	0,5	mg/kg body weight/day	
Workers / employees	Human - dermal	Short term, systemic effects	DNEL	6	mg/kg	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	1,4	mg/kg body weight/day	
Workers / employees	Human - inhalation	Short term, systemic effects	DNEL	7	mg/m3	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	7	mg/m3	

3,7-dimethyloctan-3-ol						
Area of application	**Exposure route / Environmental compartment**	**Effect on health**	**Descriptor**	**Value**	**Unit**	**Note**
	Environment - freshwater		PNEC	0,0089	mg/l	
	Environment - marine		PNEC	0,00089	mg/l	
	Environment - sporadic (intermittent) release		PNEC	0,089	mg/l	
	Environment - sewage treatment plant		PNEC	450	mg/l	
	Environment - sediment, freshwater		PNEC	0,0821	mg/kg dw	
	Environment - sediment, marine		PNEC	0,00821	mg/kg dw	
	Environment - soil		PNEC	0,0112	mg/kg dw	
Consumer	Human - dermal	Long term, systemic effects	DNEL	1,25	mg/kg bw/day	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	0,68	mg/m3	
Consumer	Human - oral	Long term, systemic effects	DNEL	0,2	mg/kg bw/day	
Consumer	Human - dermal	Short term, local effects	DNEL	2,76	mg/cm2	
Consumer	Human - dermal	Short term, local effects	DNEL	2,76	mg/cm2	
Consumer	Human - dermal	Long term, local effects	DNEL	0,19	mg/cm2	
Workers / employees	Human - dermal	Long term, local effects	DNEL	0,19	mg/cm2	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	3,16	mg/kg bw/day	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	11,14	mg/m3	
Workers / employees	Human - dermal	Short term, local effects	DNEL	2,76	mg/cm2	

Anisaldehyde						
Area of application	**Exposure route / Environmental compartment**	**Effect on health**	**Descriptor**	**Value**	**Unit**	**Note**
	Environment - freshwater		PNEC	0,081	mg/l	
	Environment - marine		PNEC	0,0081	mg/l	
	Environment - sewage treatment plant		PNEC	8,5	mg/l	

	Environment - sediment, freshwater		PNEC	0,373	mg/kg	
	Environment - sediment, marine		PNEC	0,037	mg/kg	
	Environment - soil		PNEC	0,0967	mg/kg	
	Environment - periodic release		PNEC	0,81	mg/l	
Consumer	Human - oral	Long term, systemic effects	DNEL	2,5	mg/kg bw/day	
Consumer	Human - dermal	Long term, systemic effects	DNEL	4,2	mg/kg bw/day	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	4,35	mg/m3	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	6,9	mg/kg bw/day	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	14,7	mg/m3	

1-(5,6,7,8-Tetrahydro-3,5,5,6,8,8-hexamethyl-2-naphthyl)ethan-1-one						
Area of application	**Exposure route / Environmental compartment**	**Effect on health**	**Descriptor**	**Value**	**Unit**	**Note**
	Environment - freshwater		PNEC	2,2	µg/l	
	Environment - water, sporadic (intermittent) release		PNEC	0,72	µg/l	
	Environment - marine		PNEC	0,22	µg/l	
	Environment - sediment, freshwater		PNEC	1,72	mg/kg dry weight	
	Environment - sediment, marine		PNEC	0,345	mg/kg dry weight	
	Environment - soil		PNEC	0,01	mg/kg dw	
	Environment - oral (animal feed)		PNEC	1,1	mg/kg feed	
	Environment - sewage treatment plant		PNEC	2,2	mg/l	
Industrial	Human - dermal	Short term, systemic effects	DNEL	1,8	mg/kg body weight/day	
Industrial	Human - dermal	Long term, systemic effects	DNEL	0,61	mg/kg body weight/day	
Industrial	Human - inhalation	Short term, systemic effects	DNEL	0,525	mg/m3	
Industrial	Human - inhalation	Long term, systemic effects	DNEL	0,175	mg/m3	
Consumer	Human - dermal	Short term, systemic effects	DNEL	0,915	mg/kg body weight/day	
Consumer	Human - dermal	Long term, systemic effects	DNEL	0,305	mg/kg body weight/day	
Consumer	Human - inhalation	Short term, systemic effects	DNEL	0,131	mg/m3	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	0,0435	mg/m3	
Consumer	Human - oral	Short term, systemic effects	DNEL	1,2	mg/kg body weight/day	

Consumer	Human - oral	Long term, systemic effects	DNEL	0,0125	mg/kg body weight/day	

Pentadecan-15-olide						
Area of application	**Exposure route / Environmental compartment**	**Effect on health**	**Descriptor**	**Value**	**Unit**	**Note**
	Environment - freshwater		PNEC	0,0027	mg/l	
	Environment - marine		PNEC	0,00027	mg/l	
	Environment - sediment, freshwater		DNEL	21	mg/kg dry weight	
	Environment - sediment, marine		PNEC	4,2	mg/kg dry weight	
	Environment - soil		PNEC	5,44	mg/kg dry weight	
	Environment - sewage treatment plant		PNEC	10	mg/l	

Dodecanal						
Area of application	**Exposure route / Environmental compartment**	**Effect on health**	**Descriptor**	**Value**	**Unit**	**Note**
	Environment - freshwater		PNEC	0,004	mg/l	
	Environment - marine		PNEC	0	mg/l	
	Environment - sewage treatment plant		PNEC	10	mg/l	
	Environment - sediment, freshwater		PNEC	1,41	mg/kg	
	Environment - sediment, marine		PNEC	0,141	mg/kg	
	Environment - soil		PNEC	0,278	mg/kg	

4-methyl-3-decen-5-ol						
Area of application	**Exposure route / Environmental compartment**	**Effect on health**	**Descriptor**	**Value**	**Unit**	**Note**
	Environment - freshwater		PNEC	0,76	µg/l	
	Environment - sewage treatment plant		PNEC	10	mg/l	
	Environment - sediment, freshwater		PNEC	0,092	mg/kg	
	Environment - sediment, marine		PNEC	0,0092	mg/kg	
	Environment - soil		PNEC	0,018	mg/kg	
Consumer	Human - oral	Long term, systemic effects	DNEL	0,06	mg/kg bw/day	
Consumer	Human - dermal	Long term, systemic effects	DNEL	0,25	mg/kg bw/day	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	0,22	mg/m3	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	0,5	mg/kg bw/day	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	0,88	mg/m3	

Linalool						
Area of application	**Exposure route / Environmental compartment**	**Effect on health**	**Descriptor**	**Value**	**Unit**	**Note**
	Environment - freshwater		PNEC	0,2	mg/l	
	Environment - marine		PNEC	0,02	mg/l	
	Environment - water, sporadic (intermittent) release		PNEC	2	mg/l	
	Environment - sewage treatment plant		PNEC	10	mg/l	
	Environment - sediment, freshwater		PNEC	2,22	mg/kg	
	Environment - sediment, marine		PNEC	0,222	mg/kg	
	Environment - soil		PNEC	0,3	mg/kg	
Consumer	Human - dermal	Short term, local effects	DNEL	15	mg/cm2	
Consumer	Human - dermal	Long term, systemic effects	DNEL	1,25	mg/kg bw/d	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	0,7	mg/m3	
Consumer	Human - oral	Long term, systemic effects	DNEL	0,2	mg/kg bw/d	
Consumer	Human - dermal	Short term, systemic effects	DNEL	2,5	mg/kg bw/d	
Consumer	Human - inhalation	Short term, systemic effects	DNEL	4,1	mg/m3	
Consumer	Human - oral	Short term, systemic effects	DNEL	1,2	mg/kg bw/d	
Consumer	Human - dermal	Long term, local effects	DNEL	15	mg/kg bw/d	
Consumer	Human - dermal	Short term, systemic effects	DNEL	15	mg/kg bw/d	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	2,5	mg/kg bw/d	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	2,8	mg/m3	
Workers / employees	Human - dermal	Short term, systemic effects	DNEL	5	mg/kg bw/d	
Workers / employees	Human - inhalation	Short term, systemic effects	DNEL	16,5	mg/m3	
Workers / employees	Human - dermal	Long term, local effects	DNEL	15	mg/kg bw/d	
Workers / employees	Human - dermal	Short term, local effects	DNEL	15	mg/kg bw/d	

2-(2-Ethoxyethoxy)ethanol						
Area of application	**Exposure route / Environmental compartment**	**Effect on health**	**Descriptor**	**Value**	**Unit**	**Note**
	Environment - freshwater		PNEC	1,98	mg/l	
	Environment - marine		PNEC	0,198	mg/l	
	Environment - sewage treatment plant		PNEC	500	mg/l	
	Environment - soil		PNEC	0,34	mg/kg	
	Environment - sediment, freshwater		PNEC	7,32	mg/kg	

	Environment - sediment, marine		PNEC	0,732	mg/kg	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	37	mg/m3	
Consumer	Human - inhalation	Long term, local effects	DNEL	18	mg/m3	
Consumer	Human - dermal	Long term, systemic effects	DNEL	25	mg/kg bw/d	
Consumer	Human - oral	Long term, systemic effects	DNEL	50	mg/kg bw/d	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	61	mg/m3	
Workers / employees	Human - inhalation	Long term, local effects	DNEL	30	mg/m3	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	83	mg/kg bw/d	

Oxydipropanol						
Area of application	**Exposure route / Environmental compartment**	**Effect on health**	**Descriptor**	**Value**	**Unit**	**Note**
	Environment - freshwater		PNEC	0,1	mg/l	
	Environment - marine		PNEC	0,01	mg/l	
	Environment - sporadic (intermittent) release		PNEC	1	mg/l	
	Environment - sewage treatment plant		PNEC	1000	mg/l	
	Environment - sediment, freshwater		PNEC	0,238	mg/kg	
	Environment - sediment, marine		PNEC	0,0238	mg/kg	
	Environment - soil		PNEC	0,0253	mg/kg	
	Environment - oral (animal feed)		PNEC	313	mg/kg	
Consumer	Human - dermal	Long term, systemic effects	DNEL	51	mg/kg	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	70	mg/m3	
Consumer	Human - oral	Long term, systemic effects	DNEL	24	mg/kg	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	84	mg/kg	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	238	mg/m3	

GB - United Kingdom | WEL-TWA = Workplace Exposure Limit - Long-term exposure limit - 8-hour TWA (= time weighted average) reference period (EH40/2005 Workplace exposure limits (Fourth Edition 2020)).
(EU) = Directive 91/322/EEC, 98/24/EC, 2000/39/EC, 2004/37/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU or 2019/1831/EU:
(8) = Inhalable fraction (2004/37/CE, 2017/164/EU). (9) = Respirable fraction (2004/37/CE, 2017/164/EU). (11) = Inhalable fraction (2004/37/CE). (12) = Inhalable fraction. Respirable fraction in those Member States that implement, on the date of the entry into force of this Directive, a biomonitoring system with a biological limit value not exceeding 0,002 mg Cd/g creatinine in urine (2004/37/CE). |
| WEL-STEL = Workplace Exposure Limit - Short-term exposure limit - 15-minute reference period (EH40/2005 Workplace exposure limits (Fourth Edition 2020)).
(EU) = Directive 91/322/EEC, 98/24/EC, 2000/39/EC, 2004/37/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU or 2019/1831/EU:
(8) = Inhalable fraction (2004/37/EC, 2017/164/EU). (9) = Respirable fraction (2004/37/EC, 2017/164/EU). (10) = Short-term exposure limit value in relation to a reference period of 1 minute (2017/164/EU). |
| BMGV = Biological monitoring guidance value (EH40/2005 Workplace exposure limits (Fourth Edition 2020)).
(EU) = Directive 98/24/EC or 2004/37/EC or SCOEL (Biological Limit Value - BLV, Recommendation from the Scientific Committee on Occupational Exposure Limits (SCOEL)) |
| Other information (EH40/2005 Workplace exposure limits (Fourth Edition 2020)): Sen = Capable of causing occupational asthma.

Sk = Can be absorbed through skin. Carc = Capable of causing cancer and/or heritable genetic damage.
(EU) = Directive 91/322/EEC, 98/24/EC, 2000/39/EC, 2004/37/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU, 2019/1831/EU or 2024/869/EU:
(13) = The substance can cause sensitisation of the skin and of the respiratory tract (98/24/EC, 2004/37/CE), (14) = The substance can cause sensitisation of the skin (2004/37/CE), (15) = Substantial contribution to the total body burden via dermal exposure possible. |

IRL - Ireland/Éire | OELV-8h = Occupational Exposure Limit Value - 8-hour reference period (Chemical Agents and Carcinogens CoP (Code of Practice) 2024, HSA (Health and Safety Authority)): (IFV) = Inhalable Fraction and Vapour. (I) = Inhalable Fraction. (R) = Respirable Fraction.
(EU) = Directive 91/322/EEC, 98/24/EC, 2000/39/EC, 2004/37/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU or 2019/1831/EU:
(8) = Inhalable fraction (2004/37/EC, 2017/164/EU). (9) = Respirable fraction (2004/37/EC, 2017/164/EU). (11) = Inhalable fraction (2004/37/CE). (12) = Inhalable fraction. Respirable fraction in those Member States that implement, on the date of the entry into force of this Directive, a biomonitoring system with a biological limit value not exceeding 0,002 mg Cd/g creatinine in urine (2004/37/CE). |
| OELV-15min = Occupational Exposure Limit Value - 15-minute reference period (Chemical Agents and Carcinogens CoP (Code of Practice) 2024, HSA (Health and Safety Authority)): (IFV) = Inhalable Fraction and Vapour. (I) = Inhalable Fraction. (R) = Respirable Fraction.
(EU) = Directive 91/322/EEC, 98/24/EC, 2000/39/EC, 2004/37/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU or 2019/1831/EU:
(8) = Inhalable fraction (2004/37/EC, 2017/164/EU). (9) = Respirable fraction (2004/37/EC, 2017/164/EU). (10) = Short-term exposure limit value in relation to a reference period of 1 minute (2017/164/EU). |
| BMGV = Biological Monitoring Guidance Value (Biological Monitoring Guidelines 2011, HSA (Health and Safety Authority)): ACGIH-BEI = BMGV have been sourced from Biological Exposure Indices (BEI) as issued by the American Conference of Governmental Industrial Hygienists (ACGIH). SCOEL = BMGV have been sourced from the Scientific Committee on Occupational Exposure Limit Values (SCOEL) which was set up by a Commission Decision (95/320/EC) with the mandate to advise the European Commission on occupational exposure limits for chemicals in the workplace. HSE = BMGV have been sourced from the Health and Safety Executive (HSE), UK.
(EU) = Directive 98/24/EC or 2004/37/EC or SCOEL (Biological Limit Value - BLV, Recommendation from the Scientific Committee on Occupational Exposure Limits (SCOEL)) |
| Other information (Chemical Agents and Carcinogens CoP (Code of Practice) 2024, HSA (Health and Safety Authority)): Carc1A, Carc1B = carcinogenic substance, Cat. 1A or 1B. Muta1A, Muta1B = mutagenic substance, Cat. 1A or 1B. Repr1A, Repr1B = Substances known to be toxic for reproduction, Cat. 1A or 1B. Skin = Can be absorbed through skin. Asphx = asphyxiant. Sens = The substance can cause sensitisation. BOELV = Binding Occupational Exposure Limit Values. IOELV = Indicative Occupational Exposure Limit Values.
(EU) = Directive 91/322/EEC, 98/24/EC, 2000/39/EC, 2004/37/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU, 2019/1831/EU or 2024/869/EU:
(13) = The substance can cause sensitisation of the skin and of the respiratory tract (98/24/EC, 2004/37/CE), (14) = The substance can cause sensitisation of the skin (2004/37/CE), (15) = Substantial contribution to the total body burden via dermal exposure possible. |

M - Malta | OELV-8h = Occupational Exposure Limit Value - 8 h (8-hour reference period as a time-weighted average) [S.L.646.16, last amended by L.N. 356 of 2021 and Act XXXIII of 2024]: [9] = Inhalable fraction, [10] = Respirable fraction.
(EU) = Directive 91/322/EEC, 98/24/EC, 2000/39/EC, 2004/37/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU or 2019/1831/EU:
(8) = Inhalable fraction (2004/37/EC, 2017/164/EU). (9) = Respirable fraction (2004/37/EC, 2017/164/EU). (11) = Inhalable fraction (2004/37/CE). (12) = Inhalable fraction. Respirable fraction in those Member States that implement, on the date of the entry into force of this Directive, a biomonitoring system with a biological limit value not exceeding 0,002 mg Cd/g creatinine in urine (2004/37/CE). |
| OELV-ST = Occupational Exposure Limit Value - Short-term (15-minute reference period) [S.L.646.16, last amended by L.N. 356 of 2021 and Act XXXIII of 2024]: [8] = Short-term exposure limit value in relation to a reference period of 1 minute, [9] = Inhalable fraction, [10] = Respirable fraction.
(EU) = Directive 91/322/EEC, 98/24/EC, 2000/39/EC, 2004/37/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU or 2019/1831/EU:
(8) = Inhalable fraction (2004/37/EC, 2017/164/EU). (9) = Respirable fraction (2004/37/EC, 2017/164/EU). (10) = Short-term exposure limit value in relation to a reference period of 1 minute (2017/164/EU). |
| BMGV = Biological monitoring guidance value (EH40/2005 Workplace exposure limits (Fourth Edition 2020), United Kingdom) / BBLV = Binding Biological Limit Value (S.L.646.16, last amended by L.N. 356 of 2021 and Act XXXIII of 2024).
(EU) = Directive 98/24/EC or 2004/37/EC or SCOEL (Biological Limit Value - BLV, Recommendation from the Scientific Committee on Occupational Exposure Limits (SCOEL)) |
| Other information [S.L.646.16, last amended by L.N. 356 of 2021 and Act XXXIII of 2024]: Skin = Possibility of a significant uptake through the skin. [11] = When selecting an appropriate exposure monitoring method , account should be taken of potential limitations and interferences that may arise in the presence of other sulphur compounds. [12] = The mist is defined as the thoracic fraction. [13] = Established in accordance with the Annex to Directive 91/322/EEC. [14] = During exposure monitoring for mercury and its divalent inorganic compounds, account should be taken of relevant biological monitoring techniques that complement the OELV.
(EU) = Directive 91/322/EEC, 98/24/EC, 2000/39/EC, 2004/37/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU, 2019/1831/EU or

2024/869/EU:
(EU13) = The substance can cause sensitisation of the skin and of the respiratory tract (2004/37/CE), (EU14) = The substance can cause sensitisation of the skin (2004/37/CE), (EU15) = Substantial contribution to the total body burden via dermal exposure possible. |

8.2 Exposure controls
8.2.1 Appropriate engineering controls

Ensure good ventilation. This can be achieved by local suction or general air extraction.
If this is insufficient to maintain the concentration under the WEL or AGW values, suitable breathing protection should be worn.
Applies only if maximum permissible exposure values are listed here.
Suitable assessment methods for reviewing the effectiveness of protection measures adopted include metrological and non-metrological investigative techniques.
These are specified by e.g. EN 14042.
EN 14042 "Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents".

8.2.2 Individual protection measures, such as personal protective equipment
General hygiene measures for the handling of chemicals are applicable.
Wash hands before breaks and at end of work.
Keep away from food, drink and animal feedingstuffs.
Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

Eye/face protection:
Tight fitting protective goggles with side protection (EN ISO 16321-1).

Skin protection - Hand protection:
Chemical resistant protective gloves (EN ISO 374).
Recommended
Protective nitrile gloves (EN ISO 374).
Minimum layer thickness in mm:
> 0,7
Permeation time (penetration time) in minutes:
> 10
Protective hand cream recommended.
The breakthrough times determined in accordance with EN 16523-1 were not obtained under practical conditions.
The recommended maximum wearing time is 50% of breakthrough time.

Skin protection - Other:
Solvent resistant protection clothing (EN 13034)

Respiratory protection:
If the workplace limit value is exceeded.
Gas mask filter A (EN 14387), code colour brown
Observe wearing time limitations for respiratory protection equipment.

Thermal hazards:
Not applicable

Additional information on hand protection - No tests have been performed.
In the case of mixtures, the selection has been made according to the knowledge available and the information about the contents.
Selection of materials derived from glove manufacturer's indications.
Final selection of glove material must be made taking the breakthrough times, permeation rates and degradation into account.
Selection of a suitable glove depends not only on the material but also on other quality characteristics and varies from manufacturer to manufacturer.
In the case of mixtures, the resistance of glove materials cannot be predicted and must therefore be tested before use.
The exact breakthrough time of the glove material can be requested from the protective glove manufacturer and must be observed.

8.2.3 Environmental exposure controls
No information available at present.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	Yellow
Odour:	Characteristic
Melting point/freezing point:	There is no information available on this parameter.
Boiling point or initial boiling point and boiling range:	There is no information available on this parameter.
Flammability:	There is no information available on this parameter.
Lower explosion limit:	There is no information available on this parameter.
Upper explosion limit:	There is no information available on this parameter.
Flash point:	91 °C
Auto-ignition temperature:	There is no information available on this parameter.
Decomposition temperature:	There is no information available on this parameter.
pH:	Mixture is non-soluble (in water).
Kinematic viscosity:	There is no information available on this parameter.
Solubility:	Insoluble
Partition coefficient n-octanol/water (log value):	Does not apply to mixtures.
Vapour pressure:	There is no information available on this parameter.
Density and/or relative density:	0,978 g/cm3
Relative vapour density:	There is no information available on this parameter.
Particle characteristics:	Does not apply to liquids.

9.2 Other information

No information available at present.

SECTION 10: Stability and reactivity

10.1 Reactivity

The product has not been tested.

10.2 Chemical stability

Stable with proper storage and handling.

10.3 Possibility of hazardous reactions

No dangerous reactions are known.

10.4 Conditions to avoid

None known

10.5 Incompatible materials

Avoid contact with strong oxidizing agents.

10.6 Hazardous decomposition products

No decomposition when used as directed.

SECTION 11: Toxicological information

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

Possibly more information on health effects, see Section 2.1 (classification).

Duftstoff Fresh Cotton
Art.: 217999

Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	ATE	>2000	mg/kg			calculated value
Acute toxicity, by dermal route:						n.d.a.
Acute toxicity, by inhalation:						n.d.a.
Skin corrosion/irritation:						n.d.a.
Serious eye damage/irritation:						n.d.a.
Respiratory or skin sensitisation:						n.d.a.

Germ cell mutagenicity:						n.d.a.
Carcinogenicity:						n.d.a.
Reproductive toxicity:						n.d.a.
Specific target organ toxicity - single exposure (STOT-SE):						n.d.a.
Specific target organ toxicity - repeated exposure (STOT-RE):						n.d.a.
Aspiration hazard:						n.d.a.
Symptoms:						n.d.a.

3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-indenyl propionate						
Toxicity / effect	**Endpoint**	**Value**	**Unit**	**Organism**	**Test method**	**Notes**
Acute toxicity, by oral route:	LD50	>5000	mg/kg	Rat	OECD 401 (Acute Oral Toxicity)	
Acute toxicity, by dermal route:	LD50	>5000	mg/kg	Rabbit		
Germ cell mutagenicity:				Salmonella typhimurium	OECD 471 (Bacterial Reverse Mutation Test)	Negative
Germ cell mutagenicity:				Mouse	OECD 476 (In Vitro Mammalian Cell Gene Mutation Test)	Negative
Reproductive toxicity:	NOAEL	>1000	mg/kg bw/d	Rat	OECD 421 (Reproduction/Developmental Toxicity Screening Test)	
Specific target organ toxicity - repeated exposure (STOT-RE):	NOAEL	1504,6	mg/kg bw/d	Rat	OECD 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)	

4-tert-butylcyclohexyl acetate						
Toxicity / effect	**Endpoint**	**Value**	**Unit**	**Organism**	**Test method**	**Notes**
Acute toxicity, by oral route:	LD50	3323	mg/kg	Rat	OECD 401 (Acute Oral Toxicity)	
Acute toxicity, by dermal route:	LD50	4680	mg/kg	Rabbit	OECD 402 (Acute Dermal Toxicity)	
Skin corrosion/irritation:					OECD 439 (In Vitro Skin Irritation - Reconstructed Human Epidermis Test Method)	Not irritant
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye Irritation/Corrosion)	Not irritant
Respiratory or skin sensitisation:				Mouse	OECD 429 (Skin Sensitisation - Local Lymph Node Assay)	Skin Sens. 1B

2,6-dimethyloct-7-en-2-ol						
Toxicity / effect	**Endpoint**	**Value**	**Unit**	**Organism**	**Test method**	**Notes**
Acute toxicity, by oral route:	LD50	3020	mg/kg	Rat		Analogous conclusion
Acute toxicity, by dermal route:	LD50	>5000	mg/kg	Rabbit		Analogous conclusion
Skin corrosion/irritation:				Rabbit		Skin Irrit. 2
Serious eye damage/irritation:				Rabbit		Eye Irrit. 2
Respiratory or skin sensitisation:				Guinea pig	OECD 406 (Skin Sensitisation)	No (skin contact)

Germ cell mutagenicity:				Salmonella typhimurium	OECD 471 (Bacterial Reverse Mutation Test)	Negative

(2E)-2-benzylideneoctanal						
Toxicity / effect	**Endpoint**	**Value**	**Unit**	**Organism**	**Test method**	**Notes**
Acute toxicity, by oral route:	LD50	3100	mg/kg	Rat		
Acute toxicity, by dermal route:	LD50	>3000	mg/kg	Rabbit	OECD 402 (Acute Dermal Toxicity)	
Acute toxicity, by inhalation:	LC50	>2100	mg/m3/8 h	Rat		
Respiratory or skin sensitisation:				Mouse	OECD 429 (Skin Sensitisation - Local Lymph Node Assay)	Yes (skin contact)
Germ cell mutagenicity:					OECD 471 (Bacterial Reverse Mutation Test)	Negative
Germ cell mutagenicity:					OECD 474 (Mammalian Erythrocyte Micronucleus Test)	Negative
Specific target organ toxicity - repeated exposure (STOT-RE), oral:	NOAEL	~150	mg/kg bw/d	Rat		
Specific target organ toxicity - repeated exposure (STOT-RE), dermal:	NOAEL	125	mg/kg bw/d	Rat	OECD 411 (Subchronic Dermal Toxicity - 90-day Study)	

Cis-2-tert-butylcyclohexyl acetate						
Toxicity / effect	**Endpoint**	**Value**	**Unit**	**Organism**	**Test method**	**Notes**
Acute toxicity, by oral route:	LD50	4600	mg/kg	Rat	OECD 401 (Acute Oral Toxicity)	
Acute toxicity, by dermal route:	LD50	>5000	mg/kg	Rabbit	OECD 402 (Acute Dermal Toxicity)	
Germ cell mutagenicity:				Salmonella typhimurium	OECD 471 (Bacterial Reverse Mutation Test)	Negative
Specific target organ toxicity - repeated exposure (STOT-RE), oral:	NOAEL	437	mg/kg	Rat	OECD 422 (Combined Repeated Dose Tox. Study with the Reproduction/Developm. Tox. Screening Test)	Negative

Terpineol						
Toxicity / effect	**Endpoint**	**Value**	**Unit**	**Organism**	**Test method**	**Notes**
Acute toxicity, by oral route:	LD50	>2000	mg/kg	Rat	OECD 401 (Acute Oral Toxicity)	
Acute toxicity, by dermal route:	LD50	>2000	mg/kg	Rat	OECD 402 (Acute Dermal Toxicity)	
Acute toxicity, by inhalation:	LC50	4,76	mg/l/4h	Rat	OECD 403 (Acute Inhalation Toxicity)	
Skin corrosion/irritation:				Rabbit	OECD 404 (Acute Dermal Irritation/Corrosion)	Skin Irrit. 2
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye Irritation/Corrosion)	Eye Irrit. 2

Respiratory or skin sensitisation:				Guinea pig	OECD 406 (Skin Sensitisation)	No (skin contact)
Germ cell mutagenicity:					OECD 473 (In Vitro Mammalian Chromosome Aberration Test)	Negative
Germ cell mutagenicity:					OECD 471 (Bacterial Reverse Mutation Test)	Negative
Reproductive toxicity (Developmental toxicity):	NOAEL	600	mg/kg/d			
Reproductive toxicity (Effects on fertility):	NOAEL	250	mg/kg bw/d			
Specific target organ toxicity - repeated exposure (STOT-RE), oral:	NOAEL	250	mg/kg bw/d	Rat	OECD 422 (Combined Repeated Dose Tox. Study with the Reproduction/Developm. Tox. Screening Test)	
Specific target organ toxicity - repeated exposure (STOT-RE), inhalat.:	NOAEC	2230	mg/m3	Rat	OECD 413 (Subchronic Inhalation Toxicity - 90-Day Study)	
Symptoms:						mucous membrane irritation

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

Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	>5000	mg/kg	Rat	OECD 401 (Acute Oral Toxicity)	
Acute toxicity, by dermal route:	LD50	>5000	mg/kg	Rat	OECD 402 (Acute Dermal Toxicity)	
Acute toxicity, by inhalation:	LC50	>100	mg/l			calculated value
Skin corrosion/irritation:					OECD 439 (In Vitro Skin Irritation - Reconstructed Human Epidermis Test Method)	Skin Irrit. 2
Respiratory or skin sensitisation:				Mouse	OECD 429 (Skin Sensitisation - Local Lymph Node Assay)	Skin Sens. 1B

(R)-p-mentha-1,8-diene

Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	> 2000	mg/kg	Rat	OECD 423 (Acute Oral Toxicity - Acute Toxic Class Method)	Female
Acute toxicity, by oral route:	LD50	>5000	mg/kg	Rat	OECD 401 (Acute Oral Toxicity)	
Acute toxicity, by dermal route:	LD50	>5000	mg/kg	Rabbit	OECD 402 (Acute Dermal Toxicity)	
Skin corrosion/irritation:				Rabbit		Skin Irrit. 2
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye Irritation/Corrosion)	Not irritant
Respiratory or skin sensitisation:				Mouse	OECD 429 (Skin Sensitisation - Local Lymph Node Assay)	Skin Sens. 1B

Respiratory or skin sensitisation:				Mouse	OECD 429 (Skin Sensitisation - Local Lymph Node Assay)	Skin Sens. 1
Germ cell mutagenicity:				Mouse	OECD 476 (In Vitro Mammalian Cell Gene Mutation Test)	Negative
Germ cell mutagenicity:					OECD 479 (Genetic Toxicology - In Vitro Sister Chromatid Exchange assay in Mammalian Cells)	Negative Chinese hamster
Germ cell mutagenicity:					OECD 473 (In Vitro Mammalian Chromosome Aberration Test)	Negative Chinese hamster
Germ cell mutagenicity:				Salmonella typhimurium	OECD 471 (Bacterial Reverse Mutation Test)	Negative
Carcinogenicity:	NOAEL	600	mg/kg bw/d	Rat		
Symptoms:						diarrhoea, rash, itching, gastrointestinal disturbances, mucous membrane irritation, nausea and vomiting.
Symptoms:						diarrhoea, rash, itching, gastrointestinal disturbances, mucous membrane irritation, nausea and vomiting.

Diphenyl ether

Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	2830	mg/kg	Rat		calculated value
Acute toxicity, by dermal route:	LD50	>7940	mg/kg	Rabbit		
Skin corrosion/irritation:				Rabbit		Not irritant
Serious eye damage/irritation:				Rabbit		Eye Irrit. 2
Respiratory or skin sensitisation:						No (skin contact)
Germ cell mutagenicity:				Rat	in vitro	No

Reaction mass of: (E)-oxacyclohexadec-12- en-2-one, (E)-oxacyclohexadec-13-en-2- one, a) (Z)-oxacyclohexadec-(12)-en-2-one and b) (Z)-oxacyclohexadec-(13)-en-2-one

Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	>2000	mg/kg	Rat	OECD 401 (Acute Oral Toxicity)	
Acute toxicity, by dermal route:	LD50	>2000	mg/kg	Rat	OECD 402 (Acute Dermal Toxicity)	
Skin corrosion/irritation:					OECD 404 (Acute Dermal Irritation/Corrosion)	Not irritant

Serious eye damage/irritation:					OECD 405 (Acute Eye Irritation/Corrosion)	Not irritant
Respiratory or skin sensitisation:					OECD 406 (Skin Sensitisation)	Not sensitizising
Germ cell mutagenicity:					OECD 471 (Bacterial Reverse Mutation Test)	Negative

Tetrahydro-2-isobutyl-4-methylpyran-4-ol, mixed isomers (cis and trans)

Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	>2000	mg/kg	Rat	Regulation (EC) 440/2008 B.1 (ACUTE ORAL TOXICITY)	
Acute toxicity, by oral route:	LD50	> 5000	mg/kg	Rat		
Acute toxicity, by dermal route:	LD50	>2000	mg/kg	Rabbit	OECD 402 (Acute Dermal Toxicity)	
Acute toxicity, by inhalation:	LC50	>100	mg/l			Vapours
Skin corrosion/irritation:				Rabbit	OECD 404 (Acute Dermal Irritation/Corrosion)	Not irritant
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye Irritation/Corrosion)	Irritant
Respiratory or skin sensitisation:				Guinea pig	OECD 406 (Skin Sensitisation)	No (skin contact)
Germ cell mutagenicity:				Mouse	OECD 474 (Mammalian Erythrocyte Micronucleus Test)	Negative
Germ cell mutagenicity:				Salmonella typhimurium	OECD 471 (Bacterial Reverse Mutation Test)	Negative

Ionone, methyl-

Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	>2000	mg/kg	Rat	OECD 423 (Acute Oral Toxicity - Acute Toxic Class Method)	
Acute toxicity, by dermal route:	LD50	>5000	mg/kg	Rabbit		
Skin corrosion/irritation:				Rat		Irritant
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye Irritation/Corrosion)	Irritant
Respiratory or skin sensitisation:				Guinea pig		No (skin contact)

Undecan-4-olide

Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	18500	mg/kg	Rat	OECD 401 (Acute Oral Toxicity)	
Acute toxicity, by dermal route:	LD50	>2000	mg/kg	Rat	OECD 402 (Acute Dermal Toxicity)	
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye Irritation/Corrosion)	Not irritant
Respiratory or skin sensitisation:				Guinea pig	OECD 406 (Skin Sensitisation)	Not sensitizising

3-methyl-5-phenylpentanol

Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	ATE	500	mg/kg			

Benzyl acetate						
Toxicity / effect	**Endpoint**	**Value**	**Unit**	**Organism**	**Test method**	**Notes**
Acute toxicity, by oral route:	LD50	2490	mg/kg	Rat		
Acute toxicity, by dermal route:	LD50	> 5000	mg/kg	Rabbit		

Methyl 2-naphthyl ether						
Toxicity / effect	**Endpoint**	**Value**	**Unit**	**Organism**	**Test method**	**Notes**
Acute toxicity, by oral route:	LD50	>5000	mg/kg	Rat		
Acute toxicity, by dermal route:	LD50	>5000	mg/kg	Rabbit		

2-ethyl-4-(2,2,3-trimethyl-3-cyclopenten-1-yl)-2-buten-1-ol						
Toxicity / effect	**Endpoint**	**Value**	**Unit**	**Organism**	**Test method**	**Notes**
Acute toxicity, by oral route:	LD50	>2000	mg/kg	Rat	OECD 401 (Acute Oral Toxicity)	
Acute toxicity, by dermal route:	LD50	>2000	mg/kg	Rabbit		
Acute toxicity, by dermal route:	LD50	> 5000	mg/kg	Rat		
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye Irritation/Corrosion)	Eye Irrit. 2

3,7-dimethyloctan-3-ol						
Toxicity / effect	**Endpoint**	**Value**	**Unit**	**Organism**	**Test method**	**Notes**
Acute toxicity, by oral route:	LD50	>5000	mg/kg	Rat		
Acute toxicity, by dermal route:	LD50	>5000	mg/kg	Rabbit		
Skin corrosion/irritation:				Rabbit		Skin Irrit. 2
Serious eye damage/irritation:				Rabbit		Eye Irrit. 2
Respiratory or skin sensitisation:				Mouse	OECD 429 (Skin Sensitisation - Local Lymph Node Assay)	Skin Sens. 1B
Germ cell mutagenicity:				Salmonella typhimurium	OECD 471 (Bacterial Reverse Mutation Test)	Negative
Germ cell mutagenicity:				Mammalian	OECD 473 (In Vitro Mammalian Chromosome Aberration Test)	Negative
Germ cell mutagenicity:				Mammalian	OECD 476 (In Vitro Mammalian Cell Gene Mutation Test)	Negative
Reproductive toxicity (Developmental toxicity):	NOAEL	278-345	mg/kg	Rat	OECD 443 (Extended One-Generation Reproductive Toxicity Study)	Negative
Reproductive toxicity (Developmental toxicity):	NOAEL	500	mg/kg	Rabbit	OECD 414 (Prenatal Developmental Toxicity Study)	Negative
Specific target organ toxicity - repeated exposure (STOT-RE):				Rat	OECD 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)	Negative

Specific target organ toxicity - repeated exposure (STOT-RE):	NOAEL	250	mg/kg bw/d	Rat	OECD 411 (Subchronic Dermal Toxicity - 90-day Study)	Negative

Anisaldehyde						
Toxicity / effect	**Endpoint**	**Value**	**Unit**	**Organism**	**Test method**	**Notes**
Acute toxicity, by oral route:	LD50	3210	mg/kg	Rat	OECD 401 (Acute Oral Toxicity)	
Acute toxicity, by dermal route:	LD50	>5000	mg/kg	Rabbit		
Skin corrosion/irritation:				Rabbit	OECD 404 (Acute Dermal Irritation/Corrosion)	Not irritant
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye Irritation/Corrosion)	Not irritant
Respiratory or skin sensitisation:				Mouse	OECD 429 (Skin Sensitisation - Local Lymph Node Assay)	No (skin contact)
Germ cell mutagenicity:					OECD 476 (In Vitro Mammalian Cell Gene Mutation Test)	Negative

1-(5,6,7,8-Tetrahydro-3,5,5,6,8,8-hexamethyl-2-naphthyl)ethan-1-one						
Toxicity / effect	**Endpoint**	**Value**	**Unit**	**Organism**	**Test method**	**Notes**
Acute toxicity, by oral route:	LD50	964	mg/kg	Rat	OECD 401 (Acute Oral Toxicity)	
Acute toxicity, by oral route:	LD50	570	mg/kg	Rat		
Acute toxicity, by dermal route:	LD50	7940	mg/kg	Rat		
Skin corrosion/irritation:				Rabbit	Regulation (EC) 440/2008 B.4 (ACUTE DERMAL IRRITATION/CORROSION)	Not irritant
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye Irritation/Corrosion)	Mild irritant
Respiratory or skin sensitisation:				Guinea pig		No (skin contact)
Germ cell mutagenicity:					OECD 471 (Bacterial Reverse Mutation Test)	Negative
Germ cell mutagenicity:					OECD 473 (In Vitro Mammalian Chromosome Aberration Test)	Negative
Specific target organ toxicity - repeated exposure (STOT-RE), oral:	NOAEL	5	mg/kg bw/d	Rat	OECD 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)	
Aspiration hazard:						No

[3R-(3.alpha.,3a.beta.,7.beta.,8a.alpha.)]-2,3,4,7,8,8a-hexahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulene						
Toxicity / effect	**Endpoint**	**Value**	**Unit**	**Organism**	**Test method**	**Notes**
Acute toxicity, by oral route:	LD50	>5000	mg/kg	Rat		
Acute toxicity, by dermal route:	LD50	>5000	mg/kg	Rabbit		
Aspiration hazard:						Yes

Symptoms:						respiratory distress, coughing, mucous membrane irritation

Pentadecan-15-olide						
Toxicity / effect	**Endpoint**	**Value**	**Unit**	**Organism**	**Test method**	**Notes**
Acute toxicity, by oral route:	LD50	>2000	mg/kg	Rat	OECD 401 (Acute Oral Toxicity)	Analogous conclusion
Acute toxicity, by dermal route:	LD50	>2000	mg/kg	Rat	OECD 402 (Acute Dermal Toxicity)	Analogous conclusion
Skin corrosion/irritation:				Rabbit	OECD 404 (Acute Dermal Irritation/Corrosion)	Not irritant
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye Irritation/Corrosion)	Not irritant, Analogous conclusion
Respiratory or skin sensitisation:				Mouse	OECD 429 (Skin Sensitisation - Local Lymph Node Assay)	Yes (skin contact)
Germ cell mutagenicity:				Mouse	OECD 474 (Mammalian Erythrocyte Micronucleus Test)	Negative
Germ cell mutagenicity:				Salmonella typhimurium	OECD 471 (Bacterial Reverse Mutation Test)	Negative
Reproductive toxicity:				Rat	OECD 414 (Prenatal Developmental Toxicity Study)	Negative, Analogous conclusion

Dodecanal						
Toxicity / effect	**Endpoint**	**Value**	**Unit**	**Organism**	**Test method**	**Notes**
Acute toxicity, by oral route:	LD50	23000	mg/kg	Rat		
Acute toxicity, by dermal route:	LD50	>2000	mg/kg	Rabbit		
Symptoms:						mucous membrane irritation

4-methyl-3-decen-5-ol						
Toxicity / effect	**Endpoint**	**Value**	**Unit**	**Organism**	**Test method**	**Notes**
Acute toxicity, by oral route:	LD50	8000	mg/kg	Rat	OECD 401 (Acute Oral Toxicity)	
Skin corrosion/irritation:				Rabbit	OECD 404 (Acute Dermal Irritation/Corrosion)	Not irritant
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye Irritation/Corrosion)	Not irritant
Respiratory or skin sensitisation:				Guinea pig		No (skin contact)
Germ cell mutagenicity:				Salmonella typhimurium	OECD 471 (Bacterial Reverse Mutation Test)	Negative
Reproductive toxicity:	NOAEL	300	mg/kg bw/d	Rat	OECD 421 (Reproduction/Developmental Toxicity Screening Test)	Analogous conclusion

2,4-dimethylcyclohex-3-ene-1-carbaldehyde						
Toxicity / effect	**Endpoint**	**Value**	**Unit**	**Organism**	**Test method**	**Notes**
Acute toxicity, by oral route:	LD50	>3100	mg/kg	Rat		
Acute toxicity, by dermal route:	LD50	>5000	mg/kg	Rabbit		
Respiratory or skin sensitisation:						Yes (skin contact)

Linalool						
Toxicity / effect	**Endpoint**	**Value**	**Unit**	**Organism**	**Test method**	**Notes**
Acute toxicity, by oral route:	LD50	2790	mg/kg	Rat	OECD 401 (Acute Oral Toxicity)	
Acute toxicity, by dermal route:	LD50	5610	mg/kg	Rabbit	OECD 402 (Acute Dermal Toxicity)	
Skin corrosion/irritation:				Rabbit	OECD 404 (Acute Dermal Irritation/Corrosion)	Skin Irrit. 2
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye Irritation/Corrosion)	Eye Irrit. 2
Respiratory or skin sensitisation:				Mouse	OECD 429 (Skin Sensitisation - Local Lymph Node Assay)	Skin Sens. 1B
Germ cell mutagenicity:				Mouse	OECD 474 (Mammalian Erythrocyte Micronucleus Test)	Negative
Germ cell mutagenicity:				Salmonella typhimurium	OECD 471 (Bacterial Reverse Mutation Test)	Negative
Germ cell mutagenicity:				Mouse	OECD 476 (In Vitro Mammalian Cell Gene Mutation Test)	Negative

11.2. Information on other hazards

Duftstoff Fresh Cotton Art.: 217999						
Toxicity / effect	**Endpoint**	**Value**	**Unit**	**Organism**	**Test method**	**Notes**
Endocrine disrupting properties:						Does not apply to mixtures.
Other information:						No other relevant information available on adverse effects on health.

SECTION 12: Ecological information

Possibly more information on environmental effects, see Section 2.1 (classification).

Duftstoff Fresh Cotton Art.: 217999							
Toxicity / effect	**Endpoint**	**Time**	**Value**	**Unit**	**Organism**	**Test method**	**Notes**
12.1. Toxicity to fish:							n.d.a.
12.1. Toxicity to daphnia:							n.d.a.
12.1. Toxicity to algae:							n.d.a.

12.2. Persistence and degradability:							n.d.a.
12.3. Bioaccumulative potential:							n.d.a.
12.4. Mobility in soil:							n.d.a.
12.5. Results of PBT and vPvB assessment							n.d.a.
12.6. Endocrine disrupting properties:							Does not apply to mixtures.
12.7. Other adverse effects:							No information available on other adverse effects on the environment.
Other information:							DOC-elimination degree(complexing organic substance)>= 80%/28d: n.a.
Other information:	AOX			%			According to the recipe, contains no AOX.

3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-indenyl propionate

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	LC50	96h	6,7	mg/l			
12.1. Toxicity to daphnia:	EC50	48h	4,6	mg/l			
12.2. Persistence and degradability:		28d	21,2	%		OECD 301 D (Ready Biodegradability - Closed Bottle Test)	Not readily biodegradable
12.3. Bioaccumulative potential:	Log Pow		4,4				High

4-tert-butylcyclohexyl acetate

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	LC50	96h	8,6	mg/l	Cyprinus caprio	Regulation (EC) 440/2008 C.1 (ACUTE TOXICITY FOR FISH)	
12.1. Toxicity to daphnia:	EC50	48h	5,3	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to algae:	EC50	72h	22	mg/l	Scenedesmus subspicatus	Regulation (EC) 440/2008 C.3 (FRESHWATER ALGAE AND CYANOBACTERIA, GROWTH INHIBITION TEST)	

12.1. Toxicity to algae:	NOEC/NOEL	72h	6,8	mg/l	Scenedesmus subspicatus	Regulation (EC) 440/2008 C.3 (FRESHWATER ALGAE AND CYANOBACTERIA, GROWTH INHIBITION TEST)	
12.2. Persistence and degradability:	BOD5/COD	14d	88	%		Regulation (EC) 440/2008 C.4-C (DETERMINATION OF 'READY' BIODEGRADABILITY - CO2 EVOLUTION TEST)	Readily biodegradable
12.2. Persistence and degradability:		28d	75	%		OECD 301 B (Ready Biodegradability - Co2 Evolution Test)	Readily biodegradable
12.3. Bioaccumulative potential:	BCF		334,6				Low calculated
12.3. Bioaccumulative potential:	Log Pow		4,8			OECD 117 (Partition Coefficient (n-octanol/water) - HPLC method)	Low
12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance
Toxicity to bacteria:	EC50	3h	302	mg/l	activated sludge	Regulation (EC) 440/2008 C.11 (BIODEGRADATION - ACTIVATED SLUDGE RESPIRATION INHIBITION)	

2,6-dimethyloct-7-en-2-ol

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	NOEC/NOEL	96h	<3,5	mg/l	Oncorhynchus mykiss	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to fish:	LC50	96h	4,81	mg/l	Oncorhynchus mykiss	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to daphnia:	LC50	48h	5,7	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to daphnia:	NOEC/NOEL	48h	10	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to algae:	NOEC/NOEL	72h	25	mg/l	Desmodesmus subspicatus	OECD 201 (Alga, Growth Inhibition Test)	

12.1. Toxicity to algae:	EC50	72h	80	mg/l	Desmodesmus subspicatus	OECD 201 (Alga, Growth Inhibition Test)	
12.2. Persistence and degradability:		28d	72-73	%		OECD 301 B (Ready Biodegradability - Co2 Evolution Test)	Readily biodegradable
12.3. Bioaccumulative potential:	Log Pow		3,25			OECD 117 (Partition Coefficient (n-octanol/water) - HPLC method)	No
12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance
Toxicity to bacteria:	EC50	30min	>100	mg/l	activated sludge	OECD 209 (Activated Sludge, Respiration Inhibition Test (Carbon and Ammonium Oxidation))	

(2E)-2-benzylideneoctanal

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	LC50	96h	1,7	mg/l	Pimephales promelas	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to fish:	NOEC/NOEL	96h	0,93	mg/l	Pimephales promelas	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to daphnia:	EC50	48h	0,247	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to daphnia:	EC50	21d	>157	µg/l	Daphnia magna	OECD 211 (Daphnia magna Reproduction Test)	
12.1. Toxicity to daphnia:	NOEC/NOEL	21d	63	µg/l	Daphnia magna	OECD 211 (Daphnia magna Reproduction Test)	
12.1. Toxicity to algae:	EC50	72h	>0,065	mg/l	Desmodesmus subspicatus	OECD 201 (Alga, Growth Inhibition Test)	
12.1. Toxicity to algae:	NOEC/NOEL	72h	0,065	mg/l	Desmodesmus subspicatus	OECD 201 (Alga, Growth Inhibition Test)	
12.2. Persistence and degradability:		28d	97	%		OECD 301 F (Ready Biodegradability - Manometric Respirometry Test)	Readily biodegradable
12.3. Bioaccumulative potential:	Log Pow		5,3				High

12.3. Bioaccumulative potential:	BCF		6000				High

Cis-2-tert-butylcyclohexyl acetate							
Toxicity / effect	**Endpoint**	**Time**	**Value**	**Unit**	**Organism**	**Test method**	**Notes**
12.1. Toxicity to fish:	LC50	96h	5,6	mg/l	Brachydanio rerio	Regulation (EC) 440/2008 C.1 (ACUTE TOXICITY FOR FISH)	
12.1. Toxicity to daphnia:	EC50	48h	17	mg/l	Daphnia magna	Regulation (EC) 440/2008 C.2 (DAPHNIA SP. ACUTE IMMOBILISATION TEST)	
12.1. Toxicity to algae:	EC50	72h	4,2	mg/l	Desmodesmus subspicatus	OECD 201 (Alga, Growth Inhibition Test)	
12.1. Toxicity to algae:	NOEC/NOEL	72h	0,57	mg/l	Desmodesmus subspicatus	OECD 201 (Alga, Growth Inhibition Test)	
12.2. Persistence and degradability:		28d	43	%		OECD 301 F (Ready Biodegradability - Manometric Respirometry Test)	Not readily biodegradable
12.3. Bioaccumulative potential:	Log Pow		4,75				High
12.3. Bioaccumulative potential:	BCF	33d	156			OECD 305 (Bioconcentration - Flow-Through Fish Test)	Oncorhynchus mykiss

Terpineol							
Toxicity / effect	**Endpoint**	**Time**	**Value**	**Unit**	**Organism**	**Test method**	**Notes**
12.1. Toxicity to fish:	LC50	96h	62-80	mg/l	Brachydanio rerio	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to daphnia:	EC50	48h	73	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to algae:	EC50	72h	68	mg/l	Pseudokirchneriella subcapitata	OECD 201 (Alga, Growth Inhibition Test)	
12.1. Toxicity to algae:	NOEC/NOEL	72h	3,9	mg/l	Pseudokirchneriella subcapitata	OECD 201 (Alga, Growth Inhibition Test)	
12.2. Persistence and degradability:		28d	80	%	activated sludge	OECD 310 (Ready Biodegradability - CO2 in sealed vessels (Headspace Test))	Readily biodegradable

12.2. Persistence and degradability:		28d	80	%		OECD 301 F (Ready Biodegradability - Manometric Respirometry Test)	Readily biodegradable
12.3. Bioaccumulative potential:	BCF		24,13				Low
12.3. Bioaccumulative potential:	Log Pow		2,6-3,1				Low
12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance

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

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	LC50	96h	1,3	mg/l	Lepomis macrochirus	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to fish:	LC50	30d	>0,3	mg/l	Brachydanio rerio	OECD 210 (Fish, Early-Life Stage Toxicity Test)	
12.1. Toxicity to fish:	NOEC/NOEL	30d	0,16	mg/l	Brachydanio rerio	OECD 210 (Fish, Early-Life Stage Toxicity Test)	
12.1. Toxicity to daphnia:	EC50	48h	1,38	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to daphnia:	EC50	21d	0,285	mg/l	Daphnia magna	OECD 211 (Daphnia magna Reproduction Test)	
12.1. Toxicity to daphnia:	NOEC/NOEL	21d	0,028	mg/l	Daphnia magna	OECD 211 (Daphnia magna Reproduction Test)	
12.1. Toxicity to algae:	EC50	72h	>2,6	mg/l	Desmodesmus subspicatus	OECD 201 (Alga, Growth Inhibition Test)	
12.2. Persistence and degradability:		28d	96,3	%	activated sludge	OECD 301 F (Ready Biodegradability - Manometric Respirometry Test)	Readily biodegradable
12.3. Bioaccumulative potential:	Log Pow		5,65			OECD 117 (Partition Coefficient (n-octanol/water) - HPLC method)	To be expected

(R)-p-mentha-1,8-diene

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	LC50	96h	0,70	mg/l	Pimephales promelas	OECD 203 (Fish, Acute Toxicity Test)	

12.1. Toxicity to daphnia:	EC50	48h	0,307-0,42	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to algae:	ErC50	72h	0,214-0,32	mg/l	Pseudokirchneriella subcapitata	OECD 201 (Alga, Growth Inhibition Test)	
12.1. Toxicity to algae:	NOEC/NOEL	96h	4	mg/l			
12.2. Persistence and degradability:		28d	80-92	%		OECD 301 D (Ready Biodegradability - Closed Bottle Test)	Readily biodegradable
12.2. Persistence and degradability:		28d	71	%		OECD 301 B (Ready Biodegradability - Co2 Evolution Test)	Readily biodegradable
12.3. Bioaccumulative potential:	Log Kow		4,38			OECD 117 (Partition Coefficient (n-octanol/water) - HPLC method)	37 °C, pH = 7.2
12.4. Mobility in soil:							Adsorption in ground.
12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance
Toxicity to bacteria:	EC50	3h	209	mg/l	activated sludge	OECD 209 (Activated Sludge, Respiration Inhibition Test (Carbon and Ammonium Oxidation))	
Other information:							Does not contain any organically bound halogens which can contribute to the AOX value in waste water.

Diphenyl ether							
Toxicity / effect	**Endpoint**	**Time**	**Value**	**Unit**	**Organism**	**Test method**	**Notes**
12.1. Toxicity to fish:	LC50	96h	4,2	mg/l	Oncorhynchus mykiss		
12.1. Toxicity to fish:	NOEC/NOEL	96h	3,2	mg/l	Oncorhynchus mykiss		
12.1. Toxicity to daphnia:	EC50	48h	1,96	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to daphnia:	NOEC/NOEL	48h	0,76	mg/l	Daphnia magna		

12.1. Toxicity to algae:	EC50	72h	0,455	mg/l	Pseudokirchneriella subcapitata		
12.1. Toxicity to algae:	NOEC/NOEL	72h	0,24	mg/l	Pseudokirchneriella subcapitata	OECD 201 (Alga, Growth Inhibition Test)	
12.2. Persistence and degradability:		28d	91	%		OECD 301 F (Ready Biodegradability - Manometric Respirometry Test)	Readily biodegradable
12.2. Persistence and degradability:		20d	76	%			Readily biodegradable
12.3. Bioaccumulative potential:	BCF	4d	196				
12.3. Bioaccumulative potential:	Log Pow		4,21				
12.4. Mobility in soil:	Koc		1,968				
12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance
Toxicity to bacteria:	EC50	3h	>100	mg/l	activated sludge	OECD 209 (Activated Sludge, Respiration Inhibition Test (Carbon and Ammonium Oxidation))	

Reaction mass of: (E)-oxacyclohexadec-12- en-2-one, (E)-oxacyclohexadec-13-en-2- one, a) (Z)-oxacyclohexadec-(12)-en-2-one and b) (Z)-oxacyclohexadec-(13)-en-2-one

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	LC50	96h	2	mg/l		OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to daphnia:	EC50	48h	0,48	mg/l		OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to algae:	EC50	72h	2,4	mg/l		OECD 201 (Alga, Growth Inhibition Test)	
12.2. Persistence and degradability:		28d	97	%		OECD 301 F (Ready Biodegradability - Manometric Respirometry Test)	Readily biodegradable
12.3. Bioaccumulative potential:	Log Pow		5,45				High
12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance
Toxicity to annelids:	LC50	14d	>1000	mg/kg	Lumbricus terrestris		

Tetrahydro-2-isobutyl-4-methylpyran-4-ol, mixed isomers (cis and trans)

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes

12.1. Toxicity to fish:	LC50	96h	354	mg/l	Oncorhynchus mykiss	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to daphnia:	EC50	48h	320	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to algae:	EC50	72h	>100	mg/l		OECD 201 (Alga, Growth Inhibition Test)	
12.2. Persistence and degradability:		28d	<60	%		OECD 301 C (Ready Biodegradability - Modified MITI Test (I))	Not readily biodegradable
12.3. Bioaccumulative potential:	Log Pow		1,65			Regulation (EC) 440/2008 A.8 (PARTITION COEFFICIENT)	A notable biological accumulation potential is not to be expected (LogPow 1-3)., Low23 °C
Toxicity to bacteria:	EC50	3h	>1000	mg/l	activated sludge	OECD 209 (Activated Sludge, Respiration Inhibition Test (Carbon and Ammonium Oxidation))	

Ionone, methyl-							
Toxicity / effect	**Endpoint**	**Time**	**Value**	**Unit**	**Organism**	**Test method**	**Notes**
12.1. Toxicity to fish:	LC50	96h	5,3	mg/l	Brachydanio rerio	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to fish:	NOEC/NOEL	96h	1	mg/l	Brachydanio rerio	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to daphnia:	EC50	48h	3,7	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to algae:	EC50	72h	>100	mg/l	Desmodesmus subspicatus	OECD 201 (Alga, Growth Inhibition Test)	
12.2. Persistence and degradability:		28d	76	%		OECD 301 F (Ready Biodegradability - Manometric Respirometry Test)	Readily biodegradable
12.3. Bioaccumulative potential:	BCF		586,2				High
12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance

Toxicity to bacteria:	EC50	60min	>1000	mg/l	activated sludge	OECD 209 (Activated Sludge, Respiration Inhibition Test (Carbon and Ammonium Oxidation))	

Undecan-4-olide							
Toxicity / effect	**Endpoint**	**Time**	**Value**	**Unit**	**Organism**	**Test method**	**Notes**
12.1. Toxicity to fish:	LC50	96h	21,5	mg/l	Leuciscus idus	DIN 38412 T.15	
12.1. Toxicity to daphnia:	EC50	21d	3,7	mg/l	Daphnia magna	OECD 211 (Daphnia magna Reproduction Test)	
12.1. Toxicity to daphnia:	NOEC/NOEL	21d	0,138	mg/l	Daphnia magna	OECD 211 (Daphnia magna Reproduction Test)	
12.1. Toxicity to daphnia:	EC50	48h	5,85	mg/l	Daphnia magna	Regulation (EC) 440/2008 C.2 (DAPHNIA SP. ACUTE IMMOBILISATION TEST)	calculated value
12.2. Persistence and degradability:		28d	~82	%	activated sludge	OECD 301 D (Ready Biodegradability - Closed Bottle Test)	
12.3. Bioaccumulative potential:	Log Pow		3,6			OECD 117 (Partition Coefficient (n-octanol/water) - HPLC method)	25 °C

Benzyl acetate							
Toxicity / effect	**Endpoint**	**Time**	**Value**	**Unit**	**Organism**	**Test method**	**Notes**
12.1. Toxicity to fish:	LC50	96h	4	mg/l	Oryzias latipes	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to daphnia:	EC50	48h	17	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to daphnia:	NOEC/NOEL	48h	10	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to algae:	EC50	72h	110	mg/l	Desmodesmus subspicatus	OECD 201 (Alga, Growth Inhibition Test)	
12.1. Toxicity to algae:	NOEC/NOEL	72h	52	mg/l	Desmodesmus subspicatus	OECD 201 (Alga, Growth Inhibition Test)	

12.2. Persistence and degradability:		28d	92	%		OECD 301 B (Ready Biodegradability - Co2 Evolution Test)	Readily biodegradable
12.3. Bioaccumulative potential:	Log Pow		1,96				A notable biological accumulation potential is not to be expected (LogPow 1-3)., Low25 °C
12.3. Bioaccumulative potential:	BCF		8				Low, calculated value
12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance
Toxicity to bacteria:	EC50	3h	855	mg/l	activated sludge	OECD 209 (Activated Sludge, Respiration Inhibition Test (Carbon and Ammonium Oxidation))	

2-ethyl-4-(2,2,3-trimethyl-3-cyclopenten-1-yl)-2-buten-1-ol							
Toxicity / effect	**Endpoint**	**Time**	**Value**	**Unit**	**Organism**	**Test method**	**Notes**
12.1. Toxicity to fish:	NOEC/NOEL	28d	~0,23	mg/l	Brachydanio rerio	OECD 210 (Fish, Early-Life Stage Toxicity Test)	
12.1. Toxicity to daphnia:	EC50	21d	0,788	mg/l	Daphnia magna	OECD 211 (Daphnia magna Reproduction Test)	
12.1. Toxicity to daphnia:	NOEC/NOEL	21d	0,48	mg/l	Daphnia magna	OECD 211 (Daphnia magna Reproduction Test)	
12.1. Toxicity to daphnia:	EC50	48h	1,34	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to algae:	EC50	96h	2,5	mg/l	Pseudokirchneriella subcapitata		
12.1. Toxicity to algae:	NOEC/NOEL	96h	0,44	mg/l	Pseudokirchneriella subcapitata		
12.2. Persistence and degradability:		28d	~5	%		OECD 301 D (Ready Biodegradability - Closed Bottle Test)	Not readily biodegradable
12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance

Toxicity to bacteria:	EC50	3h	~225	mg/l	activated sludge	OECD 209 (Activated Sludge, Respiration Inhibition Test (Carbon and Ammonium Oxidation))	

3,7-dimethyloctan-3-ol							
Toxicity / effect	**Endpoint**	**Time**	**Value**	**Unit**	**Organism**	**Test method**	**Notes**
12.1. Toxicity to fish:	NOEC/NOEL	96h	5	mg/l	Brachydanio rerio	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to fish:	LC50	96h	8,9	mg/l	Brachydanio rerio	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to daphnia:	EC50	48h	14,2	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to daphnia:	NOEC/NOEL	48h	8,2	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to algae:	EC50	72h	13,2-21,6	mg/l	Desmodesmus subspicatus	OECD 201 (Alga, Growth Inhibition Test)	
12.1. Toxicity to algae:	NOEC/NOEL	72h	8,5	mg/l	Desmodesmus subspicatus	OECD 201 (Alga, Growth Inhibition Test)	
12.2. Persistence and degradability:		28d	64	%		OECD 301 F (Ready Biodegradability - Manometric Respirometry Test)	Readily biodegradable
12.3. Bioaccumulative potential:	Log Pow		3,3				Low
12.3. Bioaccumulative potential:	BCF		99,87				Low
12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance
Toxicity to bacteria:	EC50	30min	1000	mg/l	Pseudomonas putida		
Water solubility:			0,32	g/l			25°C

Anisaldehyde							
Toxicity / effect	**Endpoint**	**Time**	**Value**	**Unit**	**Organism**	**Test method**	**Notes**
12.1. Toxicity to fish:	LC50	96h	148,32	mg/l	Leuciscus idus	DIN 38412 T.15	
12.1. Toxicity to fish:	NOEC/NOEL	96h	100	mg/l	Leuciscus idus	DIN 38412 T.15	
12.1. Toxicity to daphnia:	EC50	48h	82,8	mg/l	Daphnia magna	84/449/EEC C.2	
12.1. Toxicity to algae:	EC50	72h	81,11	mg/l	Scenedesmus subspicatus	DIN 38412 T.9	

12.2. Persistence and degradability:	DOC	6d	97	%		OECD 301 E (Ready Biodegradability - Modified OECD Screening Test)	Readily biodegradable
12.3. Bioaccumulative potential:	Log Pow		1,56			OECD 107 (Partition Coefficient (n-octanol/water) - Shake Flask Method)	
12.4. Mobility in soil:	Log Koc		1				Adsorption in ground.
12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance
Toxicity to bacteria:	EC50	30min	850	mg/l	activated sludge	ISO 8192	

1-(5,6,7,8-Tetrahydro-3,5,5,6,8,8-hexamethyl-2-naphthyl)ethan-1-one

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	LC50	96h	1,49	mg/l	Lepomis macrochirus	OECD 204 (Fish, Prolonged Toxicity Test - 14-Day Study)	
12.1. Toxicity to fish:	NOEC/NOEL	34d	35	µg/l	Brachydanio rerio	OECD 210 (Fish, Early-Life Stage Toxicity Test)	
12.1. Toxicity to daphnia:	EC50	21d	0,61	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to daphnia:	NOEC/NOEL	21d	196	µg/l	Daphnia magna	OECD 211 (Daphnia magna Reproduction Test)	
12.1. Toxicity to algae:	NOEC/NOEL	72h	0,404	mg/l	Pseudokirchneriella subcapitata	OECD 201 (Alga, Growth Inhibition Test)	
12.1. Toxicity to algae:	EC50	72h	0,835	mg/l	Pseudokirchneriella subcapitata	OECD 201 (Alga, Growth Inhibition Test)	
12.2. Persistence and degradability:			14	%		OECD 301 F (Ready Biodegradability - Manometric Respirometry Test)	Not readily biodegradable
12.3. Bioaccumulative potential:	BCF		597		Lepomis macrochirus	OECD 305 (Bioconcentration - Flow-Through Fish Test)	
12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance

[3R-(3.alpha.,3a.beta.,7.beta.,8a.alpha.)]-2,3,4,7,8,8a-hexahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulene

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to daphnia:	EC50	48h	0,044	mg/l	Daphnia pulex		

12.3. Bioaccumulative potential:	Log Pow		5,74				High

Pentadecan-15-olide							
Toxicity / effect	**Endpoint**	**Time**	**Value**	**Unit**	**Organism**	**Test method**	**Notes**
12.1. Toxicity to fish:	LC0	96h	>=0,11	mg/l	Brachydanio rerio	Regulation (EC) 440/2008 C.1 (ACUTE TOXICITY FOR FISH)	
12.1. Toxicity to fish:	NOEC/NOEL	33d	0,027	mg/l	Pimephales promelas	OECD 210 (Fish, Early-Life Stage Toxicity Test)	Analogous conclusion
12.1. Toxicity to daphnia:	NOEC/NOEL	21d	0,068	mg/l	Daphnia magna	OECD 211 (Daphnia magna Reproduction Test)	
12.1. Toxicity to daphnia:	EC50	48h	>0,17	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to algae:	EC50	72h	>0,47	mg/l	Desmodesmus subspicatus	Regulation (EC) 440/2008 C.3 (FRESHWATER ALGAE AND CYANOBACTERIA, GROWTH INHIBITION TEST)	
12.2. Persistence and degradability:		28d	90	%		OECD 301 F (Ready Biodegradability - Manometric Respirometry Test)	Readily biodegradable

Linalool							
Toxicity / effect	**Endpoint**	**Time**	**Value**	**Unit**	**Organism**	**Test method**	**Notes**
12.1. Toxicity to fish:	LC50	96h	27,8	mg/l	Oncorhynchus mykiss	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to daphnia:	EC50	48h	59	mg/l	Daphnia magna	DIN 38412 T.11	
12.1. Toxicity to algae:	EC50	96h	156,7	mg/l	Scenedesmus subspicatus	OECD 201 (Alga, Growth Inhibition Test)	
12.2. Persistence and degradability:	BOD	28d	64,2	%		OECD 301 D (Ready Biodegradability - Closed Bottle Test)	Readily biodegradable
12.3. Bioaccumulative potential:	Log Pow		2,84-2,97			OECD 107 (Partition Coefficient (n-octanol/water) - Shake Flask Method)	A notable biological accumulation potential is not to be expected (LogPow 1-3).

12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance
Toxicity to bacteria:	EC50	3h	> 100	mg/l	activated sludge	OECD 209 (Activated Sludge, Respiration Inhibition Test (Carbon and Ammonium Oxidation))	

SECTION 13: Disposal considerations

13.1 Waste treatment methods

For the substance / mixture / residual amounts

EC disposal code no.:
The waste codes are recommendations based on the scheduled use of this product.
Owing to the user's specific conditions for use and disposal, other waste codes may be allocated under certain circumstances. (2014/955/EU)
07 06 99 wastes not otherwise specified
Recommendation:
Sewage disposal shall be discouraged.
Pay attention to local and national official regulations.
E.g. suitable incineration plant.
E.g. dispose at suitable refuse site.

For contaminated packing material

Pay attention to local and national official regulations.
Empty container completely.
Uncontaminated packaging can be recycled.
Dispose of packaging that cannot be cleaned in the same manner as the substance.
15 01 10 packaging containing residues of or contaminated by hazardous substances

SECTION 14: Transport information

General statements

Transport by road/by rail (ADR/RID),

14.1. UN number or ID number: 3082
14.2. UN proper shipping name:
UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (ALPHA HEXYL CINNAMIC ALDEHYDE, D-LIMONENE)

14.3. Transport hazard class(es): 9
14.4. Packing group: III
14.5. Environmental hazards: environmentally hazardous
Tunnel restriction code: -
Classification code: M6
LQ: 5 L
Transport category: 3

Transport by sea (IMDG-code)

14.1. UN number or ID number: 3082
14.2. UN proper shipping name:
UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (ALPHA HEXYL CINNAMIC ALDEHYDE, D-LIMONENE)

14.3. Transport hazard class(es): 9
14.4. Packing group: III
14.5. Environmental hazards: environmentally hazardous
Marine Pollutant: Yes

EmS: F-A, S-F

Transport by air (IATA)

14.1. UN number or ID number: 3082
14.2. UN proper shipping name:
UN 3082 Environmentally hazardous substance, liquid, n.o.s. (ALPHA HEXYL CINNAMIC ALDEHYDE, D-LIMONENE)
14.3. Transport hazard class(es): 9
14.4. Packing group: III
14.5. Environmental hazards: environmentally hazardous

14.6. Special precautions for user

Persons employed in transporting dangerous goods must be trained.
All persons involved in transporting must observe safety regulations.
Precautions must be taken to prevent damage.

14.7. Maritime transport in bulk according to IMO instruments

Freighted as packaged goods rather than in bulk, therefore not applicable.
Minimum amount regulations have not been taken into account.
Danger code and packing code on request.
Comply with special provisions.

SECTION 15: Regulatory information

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

Observe restrictions:
Comply with national regulations/laws governing the protection of young people at work (national implementation of the Directive 94/33/EC)!
Comply with national regulations/laws governing maternity protection (national implementation of the Directive 92/85/EEC)!
Comply with trade association/occupational health regulations.

Directive 2012/18/EU ("Seveso III"), Annex I, Part 1 - The following categories apply to this product (others may also need to be considered according to storage, handling etc.):

Hazard categories	Notes to Annex I	Qualifying quantity (tonnes) of dangerous substances as referred to in Article 3(10) for the application of - Lower-tier requirements	Qualifying quantity (tonnes) of dangerous substances as referred to in Article 3(10) for the application of - Upper-tier requirements
E1		100	200
E2		200	500

The Notes to Annex 1 of Directive 2012/18/EU, in particular those named in the tables here and notes 1-6, must be taken into account when assigning categories and qualifying quantities.

Observe incident regulations.

National requirements/regulations on safety and health protection must be applied when using work equipment.

15.2 Chemical safety assessment

A chemical safety assessment is not provided for mixtures.

SECTION 16: Other information

Revised sections: 8
Employee training in handling dangerous goods is required.
These details refer to the product as it is delivered.
Employee instruction/training in handling hazardous materials is required.

Classification and processes used to derive the classification of the mixture in accordance with the ordinance (EG) 1272/2008 (CLP):

Classification in accordance with regulation (EC) No. 1272/2008 (CLP)	Evaluation method used
Eye Irrit. 2, H319	Classification according to calculation procedure.
Skin Irrit. 2, H315	Classification according to calculation procedure.
Skin Sens. 1, H317	Classification according to calculation procedure.
Aquatic Acute 1, H400	Classification according to calculation procedure.
Aquatic Chronic 2, H411	Classification according to calculation procedure.

The following phrases represent the posted Hazard Class and Risk Category Code (GHS/CLP) of the product and the constituents.
H226 Flammable liquid and vapour.
H317 May cause an allergic skin reaction.
H302 Harmful if swallowed.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
H373 May cause damage to organs through prolonged or repeated exposure.
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.
H413 May cause long lasting harmful effects to aquatic life.

Eye Irrit. — Eye irritation
Skin Irrit. — Skin irritation
Skin Sens. — Skin sensitization
Aquatic Acute — Hazardous to the aquatic environment - acute
Aquatic Chronic — Hazardous to the aquatic environment - chronic
STOT SE — Specific target organ toxicity - single exposure - narcotic effects
Flam. Liq. — Flammable liquid
Asp. Tox. — Aspiration hazard
Acute Tox. — Acute toxicity - oral
STOT RE — Specific target organ toxicity - repeated exposure

Key literature references and sources for data:

Regulation (EC) No 1907/2006 (REACH) and Regulation (EC) No 1272/2008 (CLP) as amended.
Guidelines for the preparation of safety data sheets as amended (ECHA).
Guidelines on labelling and packaging according to the Regulation (EG) Nr. 1272/2008 (CLP) as amended (ECHA).
Safety data sheets for the constituent substances.
ECHA Homepage - Information about chemicals.
GESTIS Substance Database (Germany).
German Environment Agency "Rigoletto" information site on substances that are hazardous to water (Germany).
EU Occupation Exposure Limits Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU, (EU) 2017/164, (EU) 2019/1831, each as amended.
National Lists of Occupational Exposure Limits for each country as amended.
Regulations on the transport of hazardous goods by road, rail, sea and air (ADR, RID, IMDG, IATA) as amended.

Any abbreviations and acronyms used in this document:

acc., acc. to according, according to
ADR Accord européen relatif au transport international des marchandises Dangereuses par Route (= European Agreement concerning the International Carriage of Dangerous Goods by Road)
AOX Adsorbable organic halogen compounds
approx. approximately
Art., Art. no. Article number
ASTM ASTM International (American Society for Testing and Materials)

ATE Acute Toxicity Estimate
BAM Bundesanstalt für Materialforschung und -prüfung (= Federal Institute for Materials Research and Testing, Germany)
BAuA Bundesanstalt für Arbeitsschutz und Arbeitsmedizin (= Federal Institute for Occupational Health and Safety, Germany)
BCF Bioconcentration factor
BSEF The International Bromine Council
CAS Chemical Abstracts Service
CLP Classification, Labelling and Packaging (REGULATION (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures)
CMR carcinogenic, mutagenic, reproductive toxic
DMEL Derived Minimum Effect Level
DNEL Derived No Effect Level
DOC Dissolved organic carbon
e.g. for example (abbreviation of Latin 'exempli gratia'), for instance
EbCx, EyCx, EbLx (x = 10, 50) Effect Concentration/Level of x % on reduction of the biomass (algae, plants)
EC European Community
ECHA European Chemicals Agency
ECx, ELx (x = 0, 3, 5, 10, 20, 50, 80, 100) Effect Concentration/Level for x % effect
EEC European Economic Community
EINECS European Inventory of Existing Commercial Chemical Substances
ELINCS European List of Notified Chemical Substances
EN European Norms
EPA United States Environmental Protection Agency (United States of America)
ErCx, EμCx, ErLx (x = 10, 50) Effect Concentration/Level of x % on inhibition of the growth rate (algae, plants)
etc. et cetera
EU European Union
EVAL Ethylene-vinyl alcohol copolymer
Fax. Fax number
gen. general
GHS Globally Harmonized System of Classification and Labelling of Chemicals
GWP Global warming potential
Koc Adsorption coefficient of organic carbon in the soil
Kow octanol-water partition coefficient
IARC International Agency for Research on Cancer
IATA International Air Transport Association
IBC (Code) International Bulk Chemical (Code)
IMDG-code International Maritime Code for Dangerous Goods
incl. including, inclusive
IUCLID International Uniform Chemical Information Database
IUPAC International Union for Pure Applied Chemistry
LC50 Lethal Concentration to 50 % of a test population
LD50 Lethal Dose to 50% of a test population (Median Lethal Dose)
Log Koc Logarithm of adsorption coefficient of organic carbon in the soil
Log Kow, Log Pow Logarithm of octanol-water partition coefficient
LQ Limited Quantities
MARPOL International Convention for the Prevention of Marine Pollution from Ships
mg/kg bw mg/kg body weight
mg/kg bw/d, mg/kg bw/day mg/kg body weight/day
mg/kg dw mg/kg dry weight
mg/kg wwt mg/kg wet weight
n.a. not applicable
n.av. not available
n.c. not checked
n.d.a. no data available
NIOSH National Institute for Occupational Safety and Health (USA)
NLP No-longer-Polymer
NOEC, NOEL No Observed Effect Concentration/Level
OECD Organisation for Economic Co-operation and Development
org. organic
OSHA Occupational Safety and Health Administration (USA)
PBT Persistent, bioaccumulative and toxic
PE Polyethylene

PMT Persistent, mobile and toxic
PNEC Predicted No Effect Concentration
ppm parts per million
PVC Polyvinylchloride
REACH Registration, Evaluation, Authorisation and Restriction of Chemicals (REGULATION (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals)
REACH-IT List-No. 6/7/8/9xx-xxx-x No. is automatically assigned, e.g. to pre-registrations without a CAS No. or other numerical identifier. List Numbers do not have any legal significance, rather they are purely technical identifiers for processing a submission via REACH-IT.
RID Règlement concernant le transport International ferroviaire de marchandises Dangereuses (= Regulation concerning the International Carriage of Dangerous Goods by Rail)
SVHC Substances of Very High Concern
Tel. Telephone
TOC Total organic carbon
UN RTDG United Nations Recommendations on the Transport of Dangerous Goods
VOC Volatile organic compounds
vPvB Very persistent and very bioaccumulative
vPvM Very persistent and very mobile

The statements made here should describe the product with regard to the necessary safety precautions - they are not meant to guarantee definite characteristics - but they are based on our present up-to-date knowledge.
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