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

Wash & Wax

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

Relevant identified uses of the substance or mixture:
Vehicle cleansing

Uses advised against:
No information available at present.

1.3 Details of the supplier of the safety data sheet

GB

LIQUI MOLY GmbH
Jerg-Wieland-Str. 4
89081 Ulm-Lehr
Tel.: (+49) 0731-1420-0
Fax: (+49) 0731-1420-88

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:

GB

Landspitali- The National University Hospital of Iceland, tel. +354 543 2222 or 112 (valid only for Iceland)

Telephone number of the company in case of emergencies:
+49 (0) 700 / 24 112 112 (LMR)
+1 872 5888271 (LMR)

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 Dam.	1	H318-Causes serious eye damage.

2.2 Label elements

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



Danger

H318-Causes serious eye damage.

P101-If medical advice is needed, have product container or label at hand. P102-Keep out of reach of children.
P280-Wear eye protection / face protection.
P305+P351+P338-IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310-Immediately call a POISON CENTER / doctor.

EUH208-Contains Citral, 1,2-benzisothiazol-3(2H)-one, Dipentene. May produce an allergic reaction.

D-Glucopyranose, oligomer, decyl octyl glycoside
1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-(C8-18(even numbered) and C18 unsaturated acyl) derivs., hydroxides, inner salts
D-glucopyranose, oligomeric, C10-16(even numbered) alkyl glycosides

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

1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-(C8-18(even numbered) and C18 unsaturated acyl) derivs., hydroxides, inner salts	
Registration number (REACH)	01-2119489410-39-XXXX
Index	---
EINECS, ELINCS, NLP, REACH-IT List-No.	931-333-8
CAS	147170-44-3
content %	5-<10
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Eye Dam. 1, H318 Aquatic Chronic 3, H412
Specific Concentration Limits and ATE	Eye Dam. 1, H318: >10 % Eye Irrit. 2, H319: >4 %

D-glucopyranose, oligomeric, C10-16(even numbered) alkyl glycosides	
Registration number (REACH)	01-2119489418-23-XXXX
Index	---
EINECS, ELINCS, NLP, REACH-IT List-No.	600-975-8
CAS	110615-47-9
content %	1-<5
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Skin Irrit. 2, H315 Eye Dam. 1, H318

Specific Concentration Limits and ATE	Skin Irrit. 2, H315: >=30 % Eye Dam. 1, H318: >12 %

D-Glucopyranose, oligomer, decyl octyl glycoside	
Registration number (REACH)	01-2119488530-36-XXXX
Index	---
EINECS, ELINCS, NLP, REACH-IT List-No.	500-220-1
CAS	68515-73-1
content %	1-<5
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Eye Dam. 1, H318

2-(2-butoxyethoxy)ethanol	**Substance for which an EU exposure limit value applies.**
Registration number (REACH)	01-2119475104-44-XXXX
Index	603-096-00-8
EINECS, ELINCS, NLP, REACH-IT List-No.	203-961-6
CAS	112-34-5
content %	1-<5
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Eye Irrit. 2, H319

Citral	
Registration number (REACH)	01-2119462829-23-XXXX
Index	605-019-00-3
EINECS, ELINCS, NLP, REACH-IT List-No.	226-394-6
CAS	5392-40-5
content %	0,1-<0,25
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317

Dipentene	
Registration number (REACH)	01-2119529223-47-XXXX
Index	601-029-00-7
EINECS, ELINCS, NLP, REACH-IT List-No.	205-341-0
CAS	138-86-3
content %	0,1-<0,25
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1, H317 Asp. Tox. 1, H304 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1)

1,2-benzisothiazol-3(2H)-one	
Registration number (REACH)	---
Index	613-088-00-6
EINECS, ELINCS, NLP, REACH-IT List-No.	220-120-9
CAS	2634-33-5
content %	0,0036-<0,036
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Acute Tox. 2, H330 Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1)
Specific Concentration Limits and ATE	Skin Sens. 1A, H317: >=0,036 % ATE (oral): 450 mg/kg ATE (as inhalation, Dusts or mist): 0,21 mg/l/4h ATE (as inhalation, Vapours): 0,5 mg/l/4h

Pyridine-2-thiol 1-oxide, sodium salt	
Registration number (REACH)	---
Index	613-344-00-7
EINECS, ELINCS, NLP, REACH-IT List-No.	223-296-5

CAS	3811-73-2
content %	0,001-<0,01
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	EUH070 Acute Tox. 3, H311 Acute Tox. 3, H331 Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 STOT RE 1, H372 (nervous system) Aquatic Acute 1, H400 (M=100) Aquatic Chronic 2, H411
Specific Concentration Limits and ATE	ATE (oral): 500 mg/kg ATE (dermal): 790 mg/kg ATE (as inhalation, Dusts or mist): 0,5 mg/l ATE (as inhalation, Vapours): 3 mg/l/4h

Impurities, test data and additional information may have been taken into account in classifying and labelling the product.
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
Supply person with fresh air and consult doctor according to symptoms.

Skin contact
Wash thoroughly using copious water - remove contaminated clothing immediately. If skin irritation occurs (redness etc.), consult doctor.

Eye contact
Remove contact lenses.
Wash thoroughly for several minutes using copious water - call doctor immediately, have Data Sheet available.
Protect uninjured eye.
Follow-up examination by an ophthalmologist.

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
irritation of the eyes
Sensitive individuals:
Allergic reaction possible.

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
Adapt to the nature and extent of fire.
Water jet spray / alcohol resistant foam / CO2 / dry extinguisher.

Unsuitable extinguishing media
None known

5.2 Special hazards arising from the substance or mixture
In case of fire the following can develop:
Oxides of carbon
Oxides of nitrogen
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.
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, sawdust) and dispose of according to Section 13.
Flush residue using copious water.

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 aerosol formation.
Avoid contact with eyes or skin.
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.
Use working methods according to operating instructions.

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.
Store at room temperature.
Protect from frost.

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	2-(2-butoxyethoxy)ethanol	
WEL-TWA: 10 ppm (67,5 mg/m3) (WEL-TWA, EU)	WEL-STEL: 15 ppm (101,2 mg/m3) (WEL-STEL, EU)	---	
Monitoring procedures: ---			
BMGV: ---	Other information: ---		

1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-(C8-18(even numbered) and C18 unsaturated acyl) derivs., hydroxides, inner salts

Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
	Environment - freshwater		PNEC	0,0135	mg/l	
	Environment - marine		PNEC	0,0014	mg/l	
	Environment - sediment, freshwater		PNEC	14,8	mg/kg	
	Environment - sediment, marine		PNEC	1,48	mg/kg	
	Environment - sewage treatment plant		PNEC	3000	mg/l	
	Environment - soil		PNEC	0,8	mg/kg	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	13,04	mg/m3	
Consumer	Human - oral	Long term, systemic effects	DNEL	7,5	mg/kg bw/d	
Consumer	Human - dermal	Long term, systemic effects	DNEL	7,5	mg/kg bw/d	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	44	mg/m3	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	12,5	mg/kg bw/d	

D-glucopyranose, oligomeric, C10-16(even numbered) alkyl glycosides

Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
	Environment - freshwater		PNEC	0,176	mg/l	
	Environment - marine		PNEC	0,018	mg/l	
	Environment - water, sporadic (intermittent) release		PNEC	0,0295	mg/l	
	Environment - sewage treatment plant		PNEC	5000	mg/l	
	Environment - sediment, freshwater		PNEC	1,516	mg/kg dw	
	Environment - sediment, marine		PNEC	0,065	mg/kg dw	
	Environment - soil		PNEC	0,654	mg/kg dw	

	Environment - oral (animal feed)		PNEC	111,11	mg/kg feed	
Consumer	Human - oral	Long term, systemic effects	DNEL	35,7	mg/kg bw/day	
Consumer	Human - dermal	Long term, systemic effects	DNEL	357000	mg/kg bw/day	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	124	mg/m3	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	595000	mg/kg bw/day	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	420	mg/kg	

D-Glucopyranose, oligomer, decyl octyl glycoside

Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
	Environment - sediment, freshwater		PNEC	1,516	mg/kg dw	
	Environment - sediment, marine		PNEC	0,152	mg/kg dw	
	Environment - soil		PNEC	0,654	mg/kg dw	
	Environment - water, sporadic (intermittent) release		PNEC	0,27	mg/l	
	Environment - sewage treatment plant		PNEC	560	mg/l	
	Environment - freshwater		PNEC	0,176	mg/l	
	Environment - marine		PNEC	0,0176	mg/l	
	Environment - oral (animal feed)		DNEL	111,11	mg/kg feed	
Consumer	Human - dermal	Long term, systemic effects	DNEL	357000	mg/kg bw/day	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	124	mg/m3	
Consumer	Human - oral	Long term, systemic effects	DNEL	35,7	mg/kg bw/day	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	595000	mg/kg bw/day	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	420	mg/m3	

2-(2-butoxyethoxy)ethanol

Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
	Environment - marine		PNEC	0,11	mg/l	
	Environment - water, sporadic (intermittent) release		PNEC	11	mg/l	
	Environment - sediment, freshwater		PNEC	4,4	mg/kg	
	Environment - sediment, marine		PNEC	0,44	mg/kg	
	Environment - soil		PNEC	0,32	mg/kg	
	Environment - sewage treatment plant		PNEC	100	mg/l	
	Environment - oral (animal feed)		PNEC	56	mg/kg	
	Environment - freshwater		PNEC	1,1	mg/l	
Consumer	Human - inhalation	Short term, local effects	DNEL	7,5	mg/m3	

Consumer	Human - dermal	Long term, systemic effects	DNEL	10	mg/kg bw/d	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	40,5	mg/m3	
Consumer	Human - oral	Long term, systemic effects	DNEL	5	mg/kg bw/d	
Consumer	Human - oral	Long term, systemic effects	DNEL	6,25	mg/kg bw/d	
Consumer	Human - inhalation	Long term, local effects	DNEL	5	mg/m3	
Workers / employees	Human - oral	Long term, local effects	DNEL	67,5	mg/m3	
Workers / employees	Human - dermal	Short term, systemic effects	DNEL	89	mg/kg bw/d	
Workers / employees	Human - inhalation	Long term, local effects	DNEL	67,5	mg/m3	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	20	mg/kg	
Workers / employees	Human - inhalation	Short term, local effects	DNEL	101,2	mg/m3	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	67,5	mg/m3	

Citral

Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
	Environment - freshwater		PNEC	0,00678	mg/l	
	Environment - marine		PNEC	0,000678	mg/l	
	Environment - water, sporadic (intermittent) release		PNEC	0,0678	mg/l	
	Environment - sewage treatment plant		PNEC	1,6	mg/l	
	Environment - sediment, freshwater		PNEC	0,125	mg/kg	
	Environment - sediment, marine		PNEC	0,0125	mg/kg	
	Environment - soil		PNEC	0,0209	mg/kg	
Consumer	Human - dermal	Long term, systemic effects	DNEL	1	mg/kg	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	2,7	mg/m3	
Consumer	Human - oral	Long term, systemic effects	DNEL	0,6	mg/kg	
Consumer	Human - dermal	Long term, local effects	DNEL	0,14	mg/cm2	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	1,7	mg/kg	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	9	mg/m3	
Workers / employees	Human - dermal	Long term, local effects	DNEL	0,14	mg/cm2	

1,2-benzisothiazol-3(2H)-one

Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
	Environment - freshwater		PNEC	0,00403	mg/l	
	Environment - marine		PNEC	0,000403	mg/l	
	Environment - sediment, freshwater		PNEC	0,0499	mg/kg dw	
	Environment - sediment, marine		PNEC	0,00499	mg/kg dw	
	Environment - soil		PNEC	3	mg/kg dw	

	Environment - sewage treatment plant		PNEC	1,03	mg/l	
	Environment - water, sporadic (intermittent) release		PNEC	0,0011	mg/l	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	1,2	mg/m3	
Consumer	Human - dermal	Long term, systemic effects	DNEL	0,345	mg/kg bw/day	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	6,81	mg/m3	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	0,966	mg/kg bw/day	

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. |

8.2 Exposure controls

8.2.1 Appropriate engineering controls

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 166).

Skin protection - Hand protection:
Chemical resistant protective gloves (EN ISO 374).
Recommended
Protective gloves made of butyl (EN ISO 374).
Minimum layer thickness in mm:
0,5
Permeation time (penetration time) in minutes:
> 120
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.
Protective hand cream recommended.

Skin protection - Other:

Protective working garments (e.g. safety shoes EN ISO 20345, long-sleeved protective working garments).

Respiratory protection:
Normally not necessary.
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:	Fruity
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:	>101 °C
Auto-ignition temperature:	There is no information available on this parameter.
Decomposition temperature:	There is no information available on this parameter.
pH:	5,8 (100 %, 20°C, DIN 19268)
Kinematic viscosity:	There is no information available on this parameter.
Solubility:	Mixable
Partition coefficient n-octanol/water (log value):	Does not apply to mixtures.
Vapour pressure:	23 hPa (20°C)
Density and/or relative density:	1,02 g/cm3 (20°C, DIN 51757)
Relative vapour density:	There is no information available on this parameter.
Particle characteristics:	Does not apply to liquids.

9.2 Other information

Explosives:	Product is not explosive.
Oxidising liquids:	There is no information available on this parameter.

SECTION 10: Stability and reactivity

10.1 Reactivity
Not to be expected

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
See also section 7.
None known

10.5 Incompatible materials

See also section 7.
Avoid contact with strong oxidizing agents.

10.6 Hazardous decomposition products

See also section 5.2
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).

Wash & Wax

Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:						n.d.a.
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.

1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-(C8-18(even numbered) and C18 unsaturated acyl) derivs., hydroxides, inner salts

Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	2430	mg/kg	Rat		
Acute toxicity, by dermal route:	LD50	>5000	mg/kg	Rat		
Skin corrosion/irritation:				Rabbit	OECD 404 (Acute Dermal Irritation/Corrosion)	Slightly irritant
Serious eye damage/irritation:		> 10	%	Rabbit	OECD 405 (Acute Eye Irritation/Corrosion)	Eye Dam. 1
Serious eye damage/irritation:		> 4-10	%			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
Germ cell mutagenicity:				Mouse	OECD 474 (Mammalian Erythrocyte Micronucleus Test)	Negative

D-glucopyranose, oligomeric, C10-16(even numbered) alkyl glycosides

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	>2000	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 Dam. 1
Respiratory or skin sensitisation:				Guinea pig	OECD 406 (Skin Sensitisation)	No (skin contact), Analogous conclusion

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
Germ cell mutagenicity:				Mammalian	OECD 473 (In Vitro Mammalian Chromosome Aberration Test)	Negative Chinese hamster
Reproductive toxicity:				Rat	OECD 414 (Prenatal Developmental Toxicity Study)	Negative
Reproductive toxicity (Developmental toxicity):	NOAEL	1000	mg/kg bw/d	Rat	OECD 414 (Prenatal Developmental Toxicity Study)	Negative
Specific target organ toxicity - repeated exposure (STOT-RE), oral:	NOAEL	1000	mg/kg bw/d	Rat	Regulation (EC) 440/2008 B.26 (SUB-CHRONIC ORAL TOXICITY TEST REPEATED DOSE 90 - DAY (RODENTS))	
Symptoms:						eyes, reddened, watering eyes, blisters by skin-contact, reddening of the skin, stomach pain

D-Glucopyranose, oligomer, decyl octyl glycoside

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	>2000	mg/kg	Rabbit	OECD 402 (Acute Dermal Toxicity)	
Skin corrosion/irritation:				Rabbit	OECD 404 (Acute Dermal Irritation/Corrosion)	Not irritant
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye Irritation/Corrosion)	Eye Dam. 1
Respiratory or skin sensitisation:				Guinea pig	Regulation (EC) 440/2008 B.6 (SKIN SENSITISATION)	Not sensitizising
Germ cell mutagenicity:				Mouse	OECD 476 (In Vitro Mammalian Cell Gene Mutation Test)	Negative
Germ cell mutagenicity:				Salmonella typhimurium	OECD 471 (Bacterial Reverse Mutation Test)	Negative
Germ cell mutagenicity:				Mouse	OECD 474 (Mammalian Erythrocyte Micronucleus Test)	Negative
Germ cell mutagenicity:				Mammalian	OECD 473 (In Vitro Mammalian Chromosome Aberration Test)	Negative
Reproductive toxicity (Developmental toxicity):	NOAEL	1000	mg/kg bw/d	Rat	OECD 421 (Reproduction/Developmental Toxicity Screening Test)	Negative
Reproductive toxicity (Effects on fertility):	NOAEL	1000	mg/kg bw/d	Rat	OECD 414 (Prenatal Developmental Toxicity Study)	Negative

Specific target organ toxicity - repeated exposure (STOT-RE), oral:	NOAEL	100	mg/kg bw/d	Rat	Regulation (EC) 440/2008 B.26 (SUB-CHRONIC ORAL TOXICITY TEST REPEATED DOSE 90 - DAY (RODENTS))	
Symptoms:						watering eyes, eyes, reddened, reddening of the skin, blisters by skin-contact, stomach pain

2-(2-butoxyethoxy)ethanol

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 oral route:	LD50	2410	mg/kg	Mouse	OECD 401 (Acute Oral Toxicity)	fasted animals
Acute toxicity, by dermal route:	LD50	2764	mg/kg	Rabbit	OECD 402 (Acute Dermal Toxicity)	
Acute toxicity, by inhalation:	LC50	>29	ppm	Rat	OECD 403 (Acute Inhalation Toxicity)	Dusts or mist
Skin corrosion/irritation:				Rabbit	OECD 404 (Acute Dermal Irritation/Corrosion)	Not irritant
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:				Salmonella typhimurium	OECD 471 (Bacterial Reverse Mutation Test)	Negative
Germ cell mutagenicity:					OECD 473 (In Vitro Mammalian Chromosome Aberration Test)	Negative Chinese hamster
Germ cell mutagenicity:				Mouse	OECD 475 (Mammalian Bone Marrow Chromosome Aberration Test)	Negative
Germ cell mutagenicity:					OECD 476 (In Vitro Mammalian Cell Gene Mutation Test)	Negative Chinese hamster
Reproductive toxicity:		1000	mg/kg	Rat	OECD 414 (Prenatal Developmental Toxicity Study)	Negative, Analogous conclusion
Specific target organ toxicity - repeated exposure (STOT-RE), oral:	NOAEL	250	mg/kg	Rat		
Specific target organ toxicity - repeated exposure (STOT-RE), dermal:	NOAEL	< 200	mg/kg bw/d	Rat	OECD 411 (Subchronic Dermal Toxicity - 90-day Study)	Male
Specific target organ toxicity - repeated exposure (STOT-RE), inhalat.:	NOAEL	14	ppm	Rat		Vapours
Aspiration hazard:						No

Symptoms:						breathing difficulties, respiratory distress, diarrhoea, coughing, mucous membrane irritation, dizziness, watering eyes, nausea

Citral

Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	~ 6800	mg/kg	Rat		
Acute toxicity, by dermal route:	LD50	>2000	mg/kg	Rat		
Skin corrosion/irritation:				Rabbit		Irritant
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye Irritation/Corrosion)	Eye Irrit. 2
Respiratory or skin sensitisation:				Guinea pig	OECD 406 (Skin Sensitisation)	Yes (skin contact)
Germ cell mutagenicity:				Salmonella typhimurium	OECD 471 (Bacterial Reverse Mutation Test)	Negative
Germ cell mutagenicity:				Mammalian	OECD 476 (In Vitro Mammalian Cell Gene Mutation Test)	Negative, Chinese hamster
Germ cell mutagenicity:				Mammalian	OECD 473 (In Vitro Mammalian Chromosome Aberration Test)	Negative, Chinese hamster
Germ cell mutagenicity:				Mouse	OECD 474 (Mammalian Erythrocyte Micronucleus Test)	Negative
Carcinogenicity:	NOAEL	60	mg/kg bw/d	Mouse	OECD 453 (Combined Chronic Toxicity/Carcinogenicity Studies)	
Specific target organ toxicity - repeated exposure (STOT-RE), oral:	NOAEL	250	mg/kg/d	Rat	OECD 422 (Combined Repeated Dose Tox. Study with the Reproduction/Developm. Tox. Screening Test)	
Specific target organ toxicity - repeated exposure (STOT-RE), oral:	NOAEL	100	mg/kg/d	Rat	OECD 453 (Combined Chronic Toxicity/Carcinogenicity Studies)	
Symptoms:						respiratory distress, drowsiness, coughing, headaches, gastrointestinal disturbances, mucous membrane irritation, nausea

Dipentene

Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	5300	mg/kg	Rat		
Acute toxicity, by dermal route:	LD50	5000	mg/kg	Rabbit		
Aspiration hazard:						Yes

Symptoms:						diarrhoea, rash, itching, gastrointestinal disturbances, mucous membrane irritation, nausea and vomiting.

1,2-benzisothiazol-3(2H)-one

Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	1193	mg/kg	Rat		
Acute toxicity, by oral route:	LD50	490	mg/kg	Rat		
Acute toxicity, by oral route:	ATE	450	mg/kg			
Acute toxicity, by dermal route:	LD50	4115	mg/kg	Rat		
Acute toxicity, by inhalation:	ATE	0,5	mg/l/4h			Vapours
Acute toxicity, by inhalation:	ATE	0,21	mg/l/4h		OECD 403 (Acute Inhalation Toxicity)	Dusts or mist
Skin corrosion/irritation:						Skin Irrit. 2
Serious eye damage/irritation:						Eye Dam. 1
Respiratory or skin sensitisation:				Guinea pig	OECD 406 (Skin Sensitisation)	Skin Sens. 1
Germ cell mutagenicity:						Negative
Reproductive toxicity (Developmental toxicity):	NOAEL	112	mg/kg	Rat		Negative, FemaleOPPTS 870.3800
Reproductive toxicity (Effects on fertility):	NOAEL	56,6	mg/kg bw/d	Rat		Negative, FemaleOPPTS 870.3800
Specific target organ toxicity - repeated exposure (STOT-RE), oral:	NOAEL	150	mg/kg bw/d	Rat	OECD 407 (Repeated Dose 28-Day Oral Toxicity Study in Rodents)	Negative
Symptoms:						vomiting, headaches, gastrointestinal disturbances, nausea

Pyridine-2-thiol 1-oxide, sodium salt

Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	ATE	500	mg/kg			
Acute toxicity, by dermal route:	ATE	790	mg/kg			
Acute toxicity, by inhalation:	ATE	0,5	mg/l			Dusts or mist
Acute toxicity, by inhalation:	ATE	3	mg/l/4h			Vapours
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 429 (Skin Sensitisation - Local Lymph Node Assay)	Skin Sens. 1
Specific target organ toxicity - repeated exposure (STOT-RE):	NOAEL	0,5	mg/kg		OECD 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)	
Symptoms:						cornea opacity, cramps, fatigue, mucous membrane irritation, trembling

11.2. Information on other hazards

Wash & Wax						
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).

Wash & Wax							
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: Yes
Other information:	AOX			%			According to the recipe, contains no AOX.

1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-(C8-18(even numbered) and C18 unsaturated acyl) derivs., hydroxides, inner salts							
Toxicity / effect	**Endpoint**	**Time**	**Value**	**Unit**	**Organism**	**Test method**	**Notes**
12.1. Toxicity to fish:	LC50	96h	1,1	mg/l	Pimephales promelas	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to fish:	NOEC/NOEL	>60d	0,135	mg/l	Oncorhynchus mykiss	OECD 210 (Fish, Early-Life Stage Toxicity Test)	
12.1. Toxicity to daphnia:	NOEC/NOEL	21d	0,32	mg/l	Daphnia magna	OECD 211 (Daphnia magna Reproduction Test)	
12.1. Toxicity to daphnia:	EC50	48h	1,9	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	

12.1. Toxicity to algae:	EC50	72h	1,5	mg/l	Desmodesmus subspicatus	OECD 201 (Alga, Growth Inhibition Test)	
12.1. Toxicity to algae:	NOEC/NOEL		2,99	mg/l			
12.2. Persistence and degradability:		>60d	80	%		OECD 311 (Anaerobic Biodeg. of Organic Comp. in Digested Sludge - by Measurement of Gas Production)	Readily biodegradable
12.2. Persistence and degradability:	DOC	28d	98-101	%	activated sludge	OECD 302 B (Inherent Biodegradability - Zahn-Wellens/EMPA Test)	Readily biodegradable

D-glucopyranose, oligomeric, C10-16(even numbered) alkyl glycosides

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	NOEC/NOEL	28d	1,8	mg/l	Brachydanio rerio	OECD 204 (Fish, Prolonged Toxicity Test - 14-Day Study)	
12.1. Toxicity to fish:	LC50	96h	2,95-5,9	mg/l	Brachydanio rerio	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to daphnia:	LC50	48h	7-14	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to daphnia:	NOEC/NOEL	21d	1-4	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to algae:	EC50	72h	5-38	mg/l	Desmodesmus subspicatus	OECD 201 (Alga, Growth Inhibition Test)	
12.2. Persistence and degradability:		28d	88	%		OECD 301 D (Ready Biodegradability - Closed Bottle Test)	Readily biodegradable
12.3. Bioaccumulative potential:	Log Kow		<=-0,07				Lowat 20 °C
12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance
12.6. Endocrine disrupting properties:							No

D-Glucopyranose, oligomer, decyl octyl glycoside

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	LC50	96h	126	mg/l	Brachydanio rerio	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to fish:	NOEC/NOEL	28d	1-3,2	mg/l	Brachydanio rerio	OECD 204 (Fish, Prolonged Toxicity Test - 14-Day Study)	

12.1. Toxicity to daphnia:	EC50	48h	>100	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to daphnia:	NOEC/NOEL	21d	1-4	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to algae:	EC50	72h	27,22	mg/l	Desmodesmus subspicatus	DIN 38412 T.9	
12.2. Persistence and degradability:	DOC	28d	100	%	activated sludge	OECD 301 E (Ready Biodegradability - Modified OECD Screening Test)	Readily biodegradable
12.3. Bioaccumulative potential:	Log Pow		<1,77				Low
12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance
Toxicity to bacteria:	EC50	6h	>560	mg/l	Pseudomonas putida		
Toxicity to annelids:		14d	>=654	mg/kg	Eisenia foetida		

2-(2-butoxyethoxy)ethanol

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	LC50	96h	1300	mg/l	Lepomis macrochirus	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to daphnia:	EC50	48h	>100	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to daphnia:	NOEC/NOEL	48h	>=100	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to algae:	NOEC/NOEL	96h	>100	mg/l	Desmodesmus subspicatus	OECD 201 (Alga, Growth Inhibition Test)	
12.2. Persistence and degradability:		28d	76	%		OECD 301 D (Ready Biodegradability - Closed Bottle Test)	
12.2. Persistence and degradability:		28d	100	%	activated sludge	OECD 302 B (Inherent Biodegradability - Zahn-Wellens/EMPA Test)	Readily biodegradable
12.3. Bioaccumulative potential:	Log Pow		0,9-1			OECD 117 (Partition Coefficient (n-octanol/water) - HPLC method)	Slight
12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance

Toxicity to bacteria:	EC10	30min	>1995	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.

Citral

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	LC50	96h	6,78	mg/l	Leuciscus idus	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to daphnia:	EC50	48h	6,8	mg/l	Daphnia magna	Regulation (EC) 440/2008 C.2 (DAPHNIA SP. ACUTE IMMOBILISATION TEST)	
12.1. Toxicity to algae:	EC50	72h	103,8	mg/l	Desmodesmus subspicatus	DIN 38412 T.9	
12.1. Toxicity to algae:	EC10	72h	3	mg/l	Desmodesmus subspicatus	DIN 38412 T.9	
12.2. Persistence and degradability:		28d	> 90	%		OECD 301 F (Ready Biodegradability - Manometric Respirometry Test)	Readily biodegradable
12.2. Persistence and degradability:		28d	92	%	activated sludge	OECD 301 C (Ready Biodegradability - Modified MITI Test (I))	Readily biodegradable
12.3. Bioaccumulative potential:	BCF		89,72				Low
12.3. Bioaccumulative potential:	Log Pow		2,76			OECD 107 (Partition Coefficient (n-octanol/water) - Shake Flask Method)	A notable biological accumulation potential is not to be expected (LogPow 1-3).25 °C
12.4. Mobility in soil:	Log Koc		2,33			OECD 121 (Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using HPLC)	
12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance

Toxicity to bacteria:	EC50	30min	~160	mg/l	activated sludge	OECD 209 (Activated Sludge, Respiration Inhibition Test (Carbon and Ammonium Oxidation))	

Dipentene

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	EC50	96h	20,2	mg/l	Pimephales promelas		
12.1. Toxicity to fish:	LC50	96h	38,5	mg/l	Pimephales promelas		
12.1. Toxicity to daphnia:	EC50	48h	70	mg/l	Daphnia pulex		
12.1. Toxicity to daphnia:	EC50	48h	28,2	mg/l	Daphnia magna		
12.1. Toxicity to algae:	IC50	78h	13,798	mg/l	Pseudokirchneriella subcapitata		
12.2. Persistence and degradability:		28d	83	%		OECD 301 D (Ready Biodegradability - Closed Bottle Test)	Readily biodegradable
12.3. Bioaccumulative potential:	Log Pow		4,57				High
12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance

1,2-benzisothiazol-3(2H)-one

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	LC50	96h	2,18	mg/l	Oncorhynchus mykiss	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to daphnia:	EC50	48h	2,94	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to algae:	ErC50	24h	0,1087	mg/l	Pseudokirchneriella subcapitata		
12.1. Toxicity to algae:	ErC10	24h	0,0268	mg/l	Pseudokirchneriella subcapitata		
12.2. Persistence and degradability:							Not readily biodegradable
12.3. Bioaccumulative potential:	BCF		6,95			OECD 305 (Bioconcentration - Flow-Through Fish Test)	
12.3. Bioaccumulative potential:	Log Pow		0,7			Regulation (EC) 440/2008 A.8 (PARTITION COEFFICIENT)	
12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance
Toxicity to bacteria:	EC50	3h	12,8	mg/l	activated sludge	OECD 209 (Activated Sludge, Respiration Inhibition Test (Carbon and Ammonium Oxidation))	

Toxicity to bacteria:	EC20	3h	3,3	mg/l	activated sludge	OECD 209 (Activated Sludge, Respiration Inhibition Test (Carbon and Ammonium Oxidation))	

Pyridine-2-thiol 1-oxide, sodium salt

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	LC50	96h	0,00767	mg/l	Brachydanio rerio	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to daphnia:	LC50	48h	0,150	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	References
12.1. Toxicity to algae:	LC50	72h	0,22	mg/l	Desmodesmus subspicatus	OECD 201 (Alga, Growth Inhibition Test)	References
12.1. Toxicity to algae:	NOEC/NOEL	72h	0,033	mg/l	Desmodesmus subspicatus	OECD 201 (Alga, Growth Inhibition Test)	References
12.2. Persistence and degradability:		28d	79	%	activated sludge	OECD 301 B (Ready Biodegradability - Co2 Evolution Test)	Readily biodegradable

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 01 aqueous washing liquids and mother liquors
20 01 29 detergents containing hazardous substances
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.

SECTION 14: Transport information

General statements

Transport by road/by rail (ADR/RID)

14.1. UN number or ID number: Not applicable
14.2. UN proper shipping name:
Not applicable
14.3. Transport hazard class(es): Not applicable
14.4. Packing group: Not applicable

14.5. Environmental hazards:	Not applicable
Tunnel restriction code:	Not applicable
Classification code:	Not applicable
LQ:	Not applicable
Transport category:	Not applicable

Transport by sea (IMDG-code)

14.1. UN number or ID number:	Not applicable

14.2. UN proper shipping name:
Not applicable

14.3. Transport hazard class(es):	Not applicable
14.4. Packing group:	Not applicable
14.5. Environmental hazards:	Not applicable
Marine Pollutant:	Not applicable
EmS:	Not applicable

Transport by air (IATA)

14.1. UN number or ID number:	Not applicable

14.2. UN proper shipping name:
Not applicable

14.3. Transport hazard class(es):	Not applicable
14.4. Packing group:	Not applicable
14.5. Environmental hazards:	Not applicable

14.6. Special precautions for user
Unless specified otherwise, general measures for safe transport must be followed.

14.7. Maritime transport in bulk according to IMO instruments
Non-dangerous material according to Transport Regulations.

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 maternity protection (national implementation of the Directive 92/85/EEC)!
Regulation (EC) No 1907/2006, Annex XVII
2-(2-butoxyethoxy)ethanol
Comply with trade association/occupational health regulations.

Directive 2010/75/EU (VOC): 1,81 %

REGULATION (EC) No 648/2004
5 % or over but less than 15 %
amphoteric surfactants
non-ionic surfactants

perfumes
CITRAL
LIMONENE
CITRONELLOL
HEXYL CINNAMAL
GERANIOL
LINALOOL
BENZISOTHIAZOLINONE
LAURYLAMINE DIPROPYLENEDIAMINE
SODIUM PYRITHIONE

Treated goods as per Regulation (EU) No. 528/2012 must display specific information on the label.
Please note Article 58 paragraph (3) subparagraph 2 of Regulation (EU) No. 528/2012.
Approval of the biocidal active substance may mean that special conditions are required for marketing the treated goods.
These are indicated in the approval of the active substance.

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: 15
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 Dam. 1, H318	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.
H330 Fatal if inhaled.
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.
H311 Toxic in contact with skin.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H331 Toxic if inhaled.
H372 Causes 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.
EUH070 Toxic by eye contact.

Eye Dam. — Serious eye damage
Aquatic Chronic — Hazardous to the aquatic environment - chronic
Skin Irrit. — Skin irritation
Eye Irrit. — Eye irritation
Skin Sens. — Skin sensitization
Flam. Liq. — Flammable liquid
Asp. Tox. — Aspiration hazard
Aquatic Acute — Hazardous to the aquatic environment - acute
Acute Tox. — Acute toxicity - inhalation
Acute Tox. — Acute toxicity - oral
Acute Tox. — Acute toxicity - dermal
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
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

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