Safety Data Sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)

Condoclean N 70 U

Version number: 1.0 Date of compilation: 28.01.2021

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

1.1 Product identifier

Trade name **Condoclean N 70 U**

Registration number (REACH) Not relevant (mixture)

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

Relevant identified uses Industrial use

1.3 Details of the supplier of the safety data sheet

FRIEDRICH SCHARR KG
Liebknechtstraße 50
70565 Stuttgart
Germany

Telephone: +49 711 7868-0
Telefax: +49 711 7868-489
e-mail: info@scharr.de
Website: www.scharr.de

e-mail (competent person) produktsicherheit@scharr.de (Produktsicherheit)

1.4 Emergency telephone number

Emergency information service +49 711 7868-237
This number is only available during the following office hours: Mon-Fri 07:00 - 17:00

Poison centre

Country	Name	Postal code/city	Telephone
Austria	Vergiftungsinformationszentrale Poisons Information Centre	1090 Wien	+43 (0)1 406 43 43
Germany	Giftinformation Freiburg	79106 Freiburg im Breisgau	+49 (0)761 19240

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

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

Hazard class	Category	Hazard class and category	Hazard statement
skin corrosion/irritation	2	Skin Irrit. 2	H315
serious eye damage/eye irritation	1	Eye Dam. 1	H318
hazardous to the aquatic environment - acute hazard	1	Aquatic Acute 1	H400
hazardous to the aquatic environment - chronic hazard	3	Aquatic Chronic 3	H412

For full text of abbreviations: see SECTION 16.

The most important adverse physicochemical, human health and environmental effects

Spillage and fire water can cause pollution of watercourses.

2.2 Label elements

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

- signal word danger

- pictograms

GHS05, GHS09

- hazard statements

H315	Causes skin irritation.
H318	Causes serious eye damage.
H410	Very toxic to aquatic life with long lasting effects.

- precautionary statements

P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/....
P302+P352	IF ON SKIN: Wash with plenty of water.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER/doctor.
P321	Specific treatment (see on this label).
P362+P364	Take off contaminated clothing and wash it before reuse.
P391	Collect spillage.
P501	Dispose of contents/container to industrial combustion plant.

- hazardous ingredients for labelling 2-(2-aminoethoxy)ethanol

2.3 Other hazards

of no significance

SECTION 3: Composition/information on ingredients

3.1 Substances

Not relevant (mixture)

3.2 Mixtures

Description of the mixture

Name of substance	Identifier	Wt%	Classification acc. to GHS	Pictograms
2-(2-Butoxyethoxy)ethanol	CAS No 112-34-5 EC No 203-961-6 REACH Reg. No 01-2119475104-44-xxxx	5 – < 10	Eye Irrit. 2 / H319	
pyridine-2-thiol 1-oxide, sodium salt	CAS No 3811-73-2 EC No 223-296-5 REACH Reg. No 01-2119493385-28-xxxx	1 – < 5	Acute Tox. 4 / H302 Acute Tox. 4 / H312 Acute Tox. 4 / H332 Skin Irrit. 2 / H315 Eye Irrit. 2 / H319 Aquatic Acute 1 / H400 Aquatic Chronic 1 / H410	

Name of substance	Identifier	Wt%	Classification acc. to GHS	Pictograms
2-(2-aminoethoxy)ethanol	CAS No 929-06-6 EC No 213-195-4 REACH Reg. No 01-2119520701-52-xxxx	1 – < 5	Skin Corr. 1B / H314 Eye Dam. 1 / H318	
Alkylpolyethoxypolypropoxybenzylether	CAS No 68154-99-4	1 – < 5	Skin Irrit. 2 / H315 Eye Irrit. 2 / H319	
Alcohols, C12-14, ethoxylated	CAS No 68439-50-9 EC No 500-213-3 REACH Reg. No 01-2119487984-16-xxxx	1 – < 5	Aquatic Acute 1 / H400 Aquatic Chronic 3 / H412	
Biphenyl-2-ol	CAS No 90-43-7 EC No 201-993-5 REACH Reg. No 01-2119511183-53-xxxx	< 1	Skin Irrit. 2 / H315 Eye Irrit. 2 / H319 STOT SE 3 / H335 Aquatic Acute 1 / H400	

Name of substance	Specific Conc. Limits	M-Factors	ATE	Exposure route
pyridine-2-thiol 1-oxide, sodium salt	-	M-factor (acute) = 100.0 M-factor (chronic) = 10.0	1.208 $^{mg}/_{kg}$ 1.900 $^{mg}/_{kg}$ 1,5 $^{mg}/_{l}$/4h	oral dermal inhalation: dust/mist
Biphenyl-2-ol	-	-	0,2373 $^{mg}/_{l}$/ 4h	inhalation: dust/mist

For full text of abbreviations: see SECTION 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General notes

Do not leave affected person unattended. Remove victim out of the danger area. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth. Self-protection of the first aider.

Following inhalation

If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. In case of respiratory tract irritation, consult a physician. Provide fresh air.

Following skin contact

Wash with plenty of soap and water.

Following eye contact

Remove contact lenses, if present and easy to do. Continue rinsing. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

Following ingestion

Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting. Call a doctor.

4.2 Most important symptoms and effects, both acute and delayed

Breathing difficulties. Headache. Vertigo.

4.3 Indication of any immediate medical attention and special treatment needed

Subsequent observance for pneumonia and pulmonary oedema. Supervise the blood circulation.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water spray, BC-powder, Carbon dioxide (CO2), Sand

Unsuitable extinguishing media

Water jet

5.2 Special hazards arising from the substance or mixture

Danger of bursting container.

Hazardous combustion products

Carbon monoxide (CO), Carbon dioxide (CO2), Phosphorus oxides (PxOy), Sulphur dioxide (SO2)

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Co-ordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Remove persons to safety.

For emergency responders

Wear breathing apparatus if exposed to vapours/dust/spray/gases. Provision of sufficient ventilation.

6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it. If substance has entered a water course or sewer, inform the responsible authority.

6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

Covering of drains

Advice on how to clean up a spill

Wipe up with absorbent material (e.g. cloth, fleece). Collect spillage: sawdust, kieselgur (diatomite), sand, universal binder

Appropriate containment techniques

Use of adsorbent materials.

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Recommendations

- measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation. Use only in well-ventilated areas.

Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities

- specific designs for storage rooms or vessels

- Recommended storage temperature 5 – 30 °C

- Lagerklasse (storage class according to TRGS 510, Germany) 10 (combustible liquids)

- packaging compatibilities

Only packagings which are approved (e.g. acc. to ADR) may be used.

7.3 Specific end use(s)

See section 16 for a general overview.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values (Workplace Exposure Limits)

Country	Name of substance	CAS No	Identifier	TWA [ppm]	TWA [mg/m³]	STEL [ppm]	STEL [mg/m³]	Source
AT	2-(2-Butoxyethoxy)ethanol	112-34-5	MAK	10	67,5	15	101,2	GKV
AT	pyridine-2-thiol 1-oxide, sodium salt	3811-73-2	MAK		1		4	GKV
CH	2-(2-Butoxyethoxy)ethanol	112-34-5	MAK	10	67	15	101	SUVA
CH	pyridine-2-thiol 1-oxide, sodium salt	3811-73-2	MAK		0,2		0,4	SUVA

Occupational exposure limit values (Workplace Exposure Limits)

Country	Name of substance	CAS No	Identifier	TWA [ppm]	TWA [mg/m³]	STEL [ppm]	STEL [mg/m³]	Source
DE	2-(2-Butoxyethoxy)ethanol	112-34-5	AGW	10	67	15	100,5	TRGS 900
DE	pyridine-2-thiol 1-oxide, sodium salt	3811-73-2	MAK		0,2		0,4	DFG
DE	pyridine-2-thiol 1-oxide, sodium salt	3811-73-2	AGW		0,2		0,4	TRGS 900
DE	Biphenyl-2-ol	90-43-7	AGW		5		5	TRGS 900
DE	Biphenyl-2-ol	90-43-7	MAK		5		5	DFG
DE	2-(2-aminoethoxy)ethanol	929-06-6	AGW	0,2	0,87	0,2	0,87	TRGS 900
DE	2-(2-aminoethoxy)ethanol	929-06-6	MAK	0,2	0,87	0,2	0,87	DFG
EU	2-(2-Butoxyethoxy)ethanol	112-34-5	IOELV	10	67,5	15	101,2	2006/15/EC

Notation

STEL short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period (unless otherwise specified)

TWA time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified)

Relevant DNELs of components of the mixture

Name of substance	CAS No	End-point	Threshold level	Protection goal, route of exposure	Used in	Exposure time
2-(2-Butoxyethoxy)ethanol	112-34-5	DNEL	67,5 mg/m³	human, inhalatory	worker (industry)	chronic - systemic effects
2-(2-Butoxyethoxy)ethanol	112-34-5	DNEL	67,5 mg/m³	human, inhalatory	worker (industry)	chronic - local effects
2-(2-Butoxyethoxy)ethanol	112-34-5	DNEL	101,2 mg/m³	human, inhalatory	worker (industry)	acute - local effects
2-(2-Butoxyethoxy)ethanol	112-34-5	DNEL	83 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects

Relevant DNELs of components of the mixture

Name of substance	CAS No	End-point	Threshold level	Protection goal, route of exposure	Used in	Exposure time
2-(2-aminoethoxy)ethanol	929-06-6	DNEL	1,12 mg/m³	human, inhalatory	worker (industry)	chronic - systemic effects
2-(2-aminoethoxy)ethanol	929-06-6	DNEL	0,67 mg/m³	human, inhalatory	worker (industry)	chronic - local effects
2-(2-aminoethoxy)ethanol	929-06-6	DNEL	7,3 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
2-(2-aminoethoxy)ethanol	929-06-6	DNEL	32 µg/cm²	human, dermal	worker (industry)	chronic - local effects
Alcohols, C12-14, ethoxylated	68439-50-9	DNEL	294 mg/m³	human, inhalatory	worker (industry)	chronic - systemic effects
Alcohols, C12-14, ethoxylated	68439-50-9	DNEL	2.080 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
Biphenyl-2-ol	90-43-7	DNEL	19,25 mg/m³	human, inhalatory	worker (industry)	chronic - systemic effects
Biphenyl-2-ol	90-43-7	DNEL	21,84 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects

Relevant PNECs of components of the mixture

Name of substance	CAS No	End-point	Threshold level	Organism	Environmental compartment	Exposure time
2-(2-Butoxyethoxy)ethanol	112-34-5	PNEC	56 $^{mg}/_{kg}$	aquatic organisms	water	short-term (single instance)
2-(2-Butoxyethoxy)ethanol	112-34-5	PNEC	11 $^{mg}/_{l}$	aquatic organisms	water	intermittent release
2-(2-Butoxyethoxy)ethanol	112-34-5	PNEC	1,1 $^{mg}/_{l}$	aquatic organisms	freshwater	short-term (single instance)
2-(2-Butoxyethoxy)ethanol	112-34-5	PNEC	0,11 $^{mg}/_{l}$	aquatic organisms	marine water	short-term (single instance)
2-(2-Butoxyethoxy)ethanol	112-34-5	PNEC	200 $^{mg}/_{l}$	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
2-(2-Butoxyethoxy)ethanol	112-34-5	PNEC	4,4 $^{mg}/_{kg}$	aquatic organisms	freshwater sediment	short-term (single instance)
2-(2-Butoxyethoxy)ethanol	112-34-5	PNEC	0,44 $^{mg}/_{kg}$	aquatic organisms	marine sediment	short-term (single instance)
2-(2-Butoxyethoxy)ethanol	112-34-5	PNEC	0,32 $^{mg}/_{kg}$	terrestrial organisms	soil	short-term (single instance)

Relevant PNECs of components of the mixture

Name of substance	CAS No	End-point	Threshold level	Organism	Environmental compartment	Exposure time
2-(2-aminoethoxy)ethanol	929-06-6	PNEC	2,02 mg/l	aquatic organisms	water	intermittent release
2-(2-aminoethoxy)ethanol	929-06-6	PNEC	0,202 mg/l	aquatic organisms	freshwater	short-term (single instance)
2-(2-aminoethoxy)ethanol	929-06-6	PNEC	0,021 mg/l	aquatic organisms	marine water	short-term (single instance)
2-(2-aminoethoxy)ethanol	929-06-6	PNEC	28 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
2-(2-aminoethoxy)ethanol	929-06-6	PNEC	0,99 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
2-(2-aminoethoxy)ethanol	929-06-6	PNEC	0,103 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
2-(2-aminoethoxy)ethanol	929-06-6	PNEC	0,079 mg/kg	terrestrial organisms	soil	short-term (single instance)
Alcohols, C12-14, ethoxylated	68439-50-9	PNEC	0,074 mg/l	aquatic organisms	freshwater	short-term (single instance)
Alcohols, C12-14, ethoxylated	68439-50-9	PNEC	0,007 mg/l	aquatic organisms	marine water	short-term (single instance)
Alcohols, C12-14, ethoxylated	68439-50-9	PNEC	10 g/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
Alcohols, C12-14, ethoxylated	68439-50-9	PNEC	66,67 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
Alcohols, C12-14, ethoxylated	68439-50-9	PNEC	6,66 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
Alcohols, C12-14, ethoxylated	68439-50-9	PNEC	1 mg/kg	terrestrial organisms	soil	short-term (single instance)
Biphenyl-2-ol	90-43-7	PNEC	0,001 mg/l	aquatic organisms	freshwater	short-term (single instance)
Biphenyl-2-ol	90-43-7	PNEC	0 mg/l	aquatic organisms	marine water	short-term (single instance)
Biphenyl-2-ol	90-43-7	PNEC	0,56 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
Biphenyl-2-ol	90-43-7	PNEC	0,128 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
Biphenyl-2-ol	90-43-7	PNEC	0,013 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
Biphenyl-2-ol	90-43-7	PNEC	2,5 mg/kg	terrestrial organisms	soil	short-term (single instance)

8.2 Exposure controls

Appropriate engineering controls

General ventilation.

Individual protection measures (personal protective equipment)

Eye/face protection

Wear eye/face protection.

Skin protection

- hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. Check leak-tightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

- type of material

NBR: acrylonitrile-butadiene rubber

- material thickness 0,7 mm

- breakthrough times of the glove material

>480 minutes (permeation: level 6)

- protective gloves - splash protection

Type of material nitrile

- other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

Environmental exposure controls

Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.

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	not determined
Boiling point or initial boiling point and boiling range	100 °C at 1.013 hPa
Evaporation rate	not determined
Flammability	this material is combustible, but will not ignite readily
Lower and upper explosion limit	0,7 vol% - 5,3 vol%

Flash point	>100 °C
Auto-ignition temperature	not determined
pH (value)	9,3 (in aqueous solution: 5 wt%, 20 °C)
Kinematic viscosity	10 $^{mm^2}/_{s}$ at 20 °C
Solubility(ies)	not determined

Partition coefficient

Partition coefficient n-octanol/water (log value)	this information is not available

Vapour pressure	not determined

Density and/or relative density

Density	1,056 $^{g}/_{cm^3}$ at 15 °C

Particle characteristics	no data available

9.2 Other information

Information with regard to physical hazard classes	hazard classes acc. to GHS (physical hazards): not relevant

Other safety characteristics

Solid content	1,35 %

SECTION 10: Stability and reactivity

10.1 Reactivity

Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".

10.2 Chemical stability

See below "Conditions to avoid".

10.3 Possibility of hazardous reactions

In case of insufficient ventilation and/or in use, may form flammable/explosive vapour-air mixture.

10.4 Conditions to avoid

There are no specific conditions known which have to be avoided.

10.5 Incompatible materials

Oxidisers

10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.

SECTION 11: Toxicological information

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

Test data are not available for the complete mixture.

Classification procedure

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

Classification according to GHS (1272/2008/EC, CLP)

Acute toxicity

Shall not be classified as acutely toxic.

Acute toxicity estimate (ATE) of components of the mixture

Name of substance	CAS No	Exposure route	ATE
pyridine-2-thiol 1-oxide, sodium salt	3811-73-2	oral	1.208 $^{mg}/_{kg}$
pyridine-2-thiol 1-oxide, sodium salt	3811-73-2	dermal	1.900 $^{mg}/_{kg}$
pyridine-2-thiol 1-oxide, sodium salt	3811-73-2	inhalation: dust/mist	1,5 $^{mg}/_{l}$/4h
Biphenyl-2-ol	90-43-7	inhalation: dust/mist	0,2373 $^{mg}/_{l}$/4h

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/eye irritation

Causes serious eye damage.

Respiratory or skin sensitisation

Shall not be classified as a respiratory or skin sensitiser.

Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

Carcinogenicity

Shall not be classified as carcinogenic.

Reproductive toxicity

Shall not be classified as a reproductive toxicant.

Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

11.2 Information on other hazards

There is no additional information.

SECTION 12: Ecological information

12.1 Toxicity

Acc. to 1272/2008/EC: Very toxic to aquatic life with long lasting effects.
Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen (Ordinance on facilities for handling substances hazardous to water) (AwSV): WGK 2, obviously hazardous to water (Germany)

Aquatic toxicity (acute) of components of the mixture

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
2-(2-Butoxyethoxy)ethanol	112-34-5	LC50	1.300 mg/l	fish	96 h
2-(2-Butoxyethoxy)ethanol	112-34-5	EC50	>100 mg/l	aquatic invertebrates	48 h
2-(2-Butoxyethoxy)ethanol	112-34-5	ErC50	>100 mg/l	algae	96 h
2-(2-aminoethoxy)ethanol	929-06-6	LC50	>681 mg/l	fish	96 h
2-(2-aminoethoxy)ethanol	929-06-6	EC50	>500 mg/l	aquatic invertebrates	48 h
2-(2-aminoethoxy)ethanol	929-06-6	ErC50	202 mg/l	algae	72 h
Alcohols, C12-14, ethoxylated	68439-50-9	LC50	1,2 mg/l	fish	96 h
Alcohols, C12-14, ethoxylated	68439-50-9	EC50	0,53 mg/l	aquatic invertebrates	48 h
pyridine-2-thiol 1-oxide, sodium salt	3811-73-2	LC50	7,3 µg/l	fish	96 h
pyridine-2-thiol 1-oxide, sodium salt	3811-73-2	EC50	0,6 mg/l	aquatic invertebrates	48 h
pyridine-2-thiol 1-oxide, sodium salt	3811-73-2	ErC50	0,46 mg/l	algae	72 h
pyridine-2-thiol 1-oxide, sodium salt	3811-73-2	EbC50	0,23 mg/l	algae	72 h
Biphenyl-2-ol	90-43-7	LC50	4,5 mg/l	fish	96 h
Biphenyl-2-ol	90-43-7	ErC50	3,57 mg/l	algae	72 h
Biphenyl-2-ol	90-43-7	EC50	1,35 mg/l	algae	72 h

Aquatic toxicity (chronic) of components of the mixture

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
2-(2-aminoethoxy)ethanol	929-06-6	EC50	110 mg/l	microorganisms	17 h
Alcohols, C12-14, ethoxylated	68439-50-9	EC50	>10 g/l	microorganisms	16,9 h
pyridine-2-thiol 1-oxide, sodium salt	3811-73-2	EC50	1,81 mg/l	microorganisms	3 h

Aquatic toxicity (chronic) of components of the mixture					
Name of substance	**CAS No**	**Endpoint**	**Value**	**Species**	**Exposure time**
Biphenyl-2-ol	90-43-7	EC50	56 $^{mg}/_{l}$	microorganisms	3 h

Biodegradation

Data are not available.

12.2 Persistence and degradability

Degradability of components of the mixture						
Name of substance	**CAS No**	**Process**	**Degradation rate**	**Time**	**Method**	**Source**
2-(2-Butoxyethoxy)ethanol	112-34-5	oxygen depletion	85 %	28 d		ECHA
2-(2-aminoethoxy)ethanol	929-06-6	oxygen depletion	>70 %	28 d		ECHA
Alcohols, C12-14, ethoxylated	68439-50-9	oxygen depletion	95 %	28 d		ECHA
pyridine-2-thiol 1-oxide, sodium salt	3811-73-2	carbon dioxide generation	2 %	8 d		ECHA
Biphenyl-2-ol	90-43-7	carbon dioxide generation	33,5 – 35,2 %	3 d		ECHA

12.3 Bioaccumulative potential

Data are not available.

Bioaccumulative potential of components of the mixture				
Name of substance	**CAS No**	**BCF**	**Log KOW**	**BOD5/COD**
2-(2-Butoxyethoxy)ethanol	112-34-5		1 (pH value: 7, 20 °C)	
2-(2-aminoethoxy)ethanol	929-06-6		-1,89 (25 °C)	
Alcohols, C12-14, ethoxylated	68439-50-9	12,7		
pyridine-2-thiol 1-oxide, sodium salt	3811-73-2		-2,38 (pH value: 7, 20 °C)	
Biphenyl-2-ol	90-43-7	21,7	3,18 (22,5 °C)	

12.4 Mobility in soil

Data are not available.

12.5 Results of PBT and vPvB assessment

Data are not available.

12.6 Endocrine disrupting properties

Information on this property is not available.

12.7 Other adverse effects

Data are not available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

Waste treatment of containers/packagings

It is a dangerous waste; only packagings which are approved (e.g. acc. to ADR) may be used. Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

Relevant provisions relating to waste

07 06 01*

Remarks

Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

SECTION 14: Transport information

14.1 UN number or ID number

ADR/RID/ADN	UN 3082
IMDG-Code	UN 3082
ICAO-TI	UN 3082

14.2 UN proper shipping name

ADR/RID/ADN	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
IMDG-Code	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
ICAO-TI	Environmentally hazardous substance, liquid, n.o.s.
Technical name (Hazardous ingredients)	Alcohols, C12-14, ethoxylated, pyridine-2-thiol 1-oxide, sodium salt

14.3 Transport hazard class(es)

ADR/RID/ADN	9
IMDG-Code	9
ICAO-TI	9

14.4 Packing group

ADR/RID/ADN	III
IMDG-Code	III
ICAO-TI	III

14.5 Environmental hazards

hazardous to the aquatic environment

Environmentally hazardous substance (aquatic environment)	Alcohols, C12-14, ethoxylated, pyridine-2-thiol 1-oxide, sodium salt

14.6 Special precautions for user

Provisions for dangerous goods (ADR) should be complied within the premises.

14.7 Maritime transport in bulk according to IMO instruments

The cargo is not intended to be carried in bulk.

Information for each of the UN Model Regulations

Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN) - additional information

Classification code	M6
Danger label(s)	9, fish and tree

Environmental hazards	yes (hazardous to the aquatic environment)
Special provisions (SP)	274, 335, 375, 601
Excepted quantities (EQ)	E1
Limited quantities (LQ)	5 L
Transport category (TC)	3
Tunnel restriction code (TRC)	-
Hazard identification No	90

International Maritime Dangerous Goods Code (IMDG) - additional information

Marine pollutant	yes (hazardous to the aquatic environment) (Alcohols, C12-14, ethoxylated)
Danger label(s)	9, fish and tree

Special provisions (SP)	274, 335, 969
Excepted quantities (EQ)	E1
Limited quantities (LQ)	5 L
EmS	F-A, S-F
Stowage category	A

International Civil Aviation Organization (ICAO-IATA/DGR) - additional information

Environmental hazards	yes (hazardous to the aquatic environment)
Danger label(s)	9, fish and tree

Special provisions (SP)	A97, A158, A197
Excepted quantities (EQ)	E1
Limited quantities (LQ)	30 kg

SECTION 15: Regulatory information

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

Relevant provisions of the European Union (EU)

VOC Deco-Paint Directive 2004/42/EC

VOC content	13,1 %

Directive on industrial emissions (VOCs, 2010/75/EU)

VOC content	3,85 %

National regulations (Austria)

Ordinance on combustible liquids (VbF) not assigned (flash point higher than 100 °C)

National regulations (Germany)

Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen (Ordinance on facilities for handling substances hazardous to water) (AwSV)

Wassergefährdungsklasse, WGK (water hazard class) 2 obviously hazardous to water

National regulations Switzerland

Ordinance on the incentive tax on volatile organic compounds (VOCV)

VOC content (object of taxation): 5,7 %

National inventories

All ingredients are listed
DSL/NDSL (Canada)
ENCS, class 1 and 2 (MITI-inventory, Japan)
AICS (Australia)
KECL (Republic of Korea)
PICCS (Philippines)
IECSC (China)
NZIoC (New Zealand)
REACH (Europe)
Toxic Substance Control Act (TSCA)

15.2 Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
2006/15/EC	Commission Directive establishing a second list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC and amending Directives 91/322/EEC and 2000/39/EC
Acute Tox.	Acute toxicity
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
ADR	Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
ADR/RID/ADN	European Agreements concerning the International Carriage of Dangerous Goods by Road/Rail/Inland Waterways (ADR/RID/ADN)

Abbr.	Descriptions of used abbreviations
AGW	Workplace exposure limit
Aquatic Acute	Hazardous to the aquatic environment - acute hazard
Aquatic Chronic	Hazardous to the aquatic environment - chronic hazard
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BOD	Biochemical Oxygen Demand
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
COD	Chemical oxygen demand
DFG	Deutsche Forschungsgemeinschaft MAK-und BAT-Werte-Liste, Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe, Wiley-VCH, Weinheim
DGR	Dangerous Goods Regulations (see IATA/DGR)
DNEL	Derived No-Effect Level
EbC50	≡ EC50: in this method, that concentration of test substance which results in a 50 % reduction in either growth (EbC50) or growth rate (ErC50) relative to the control
EC50	Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 % changes in response (e.g. on growth) during a specified time interval
EC No	The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union)
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
EmS	Emergency Schedule
ErC50	≡ EC50: in this method, that concentration of test substance which results in a 50 % reduction in either growth (EbC50) or growth rate (ErC50) relative to the control
Eye Dam.	Seriously damaging to the eye
Eye Irrit.	Irritant to the eye
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
GKV	Grenzwerteverordnung
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
ICAO-TI	Technical instructions for the safe transport of dangerous goods by air
IMDG	International Maritime Dangerous Goods Code
IMDG-Code	International Maritime Dangerous Goods Code
index No	The Index number is the identification code given to the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008
IOELV	Indicative occupational exposure limit value

Abbr.	Descriptions of used abbreviations
LC50	Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethality during a specified time interval
log KOW	n-Octanol/water
M-factor	Means a multiplying factor. It is applied to the concentration of a substance classified as hazardous to the aquatic environment acute category 1 or chronic category 1, and is used to derive by the summation method the classification of a mixture in which the substance is present
NLP	No-Longer Polymer
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted No-Effect Concentration
ppm	Parts per million
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)
Skin Corr.	Corrosive to skin
Skin Irrit.	Irritant to skin
STEL	Short-term exposure limit
STOT SE	Specific target organ toxicity - single exposure
SUVA	Grenzwerte am Arbeitsplatz, Suva
TRGS	Technische Regeln für GefahrStoffe (technical rules for hazardous substances, Germany)
TRGS 900	Arbeitsplatzgrenzwerte (TRGS 900)
TWA	Time-weighted average
VOC	Volatile Organic Compounds
vPvB	Very Persistent and very Bioaccumulative

Key literature references and sources for data

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU.

Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

Classification procedure

Physical and chemical properties: The classification is based on tested mixture.
Health hazards, Environmental hazards: The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

List of relevant phrases (code and full text as stated in chapter 2 and 3)

Code	Text
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.

Code	Text
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.