Safety Data Sheet

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

Koralan Holzöl Spezial

Version number: GHS 1.0 Date of compilation: 05.03.2021

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

1.1 Product identifier

Trade name **Koralan Holzöl Spezial**

Registration number (REACH) not relevant (mixture)

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

Relevant identified uses Wood preservation product

1.3 Details of the supplier of the safety data sheet

Kurt Obermeier GmbH & Co. KG
Berghäuser Str. 70
57319 Bad Berleburg
Germany

Telephone: +49 2751 5240
Telefax: +49 2751 5041
e-mail: info@obermeier.de
Website: http://www.obermeier.de/

e-mail (competent person) sdb@obermeier.de

1.4 Emergency telephone number

Name	Telephone
24h	+49 (0) 70024112112 (KOR)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

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

Section	Hazard class	Category	Hazard class and category	Hazard statement
4.1C	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 not required
- Pictograms not required

- Hazard statements

H412 Harmful to aquatic life with long lasting effects.

- Precautionary statements

P102 Keep out of reach of children.
P273 Avoid release to the environment.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- Supplemental hazard information

EUH208	Contains 1,2-benzisothiazol-3(2H)-one, reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1), 3-iodo-2-propynyl butylcarbamate, 2-methyl-2H-isothiazol-3-one. May produce an allergic reaction.
EUH211	Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

2.3 Other hazards

Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

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	Specific Conc. Limits	M-Factors
Titanium dioxide	CAS No 13463-67-7 EC No 236-675-5 REACH Reg. No 01-2119489379-17-xxxx	1 – < 10	Carc. 2 / H351		
3-iodo-2-propynyl butylcarbamate	CAS No 55406-53-6 EC No 259-627-5 Index No 616-212-00-7 REACH Reg. No 01-2120762115-60-xxxx	< 1	Acute Tox. 4 / H302 Acute Tox. 3 / H331 Eye Dam. 1 / H318 Skin Sens. 1 / H317 STOT RE 1 / H372 Aquatic Acute 1 / H400 Aquatic Chronic 1 / H410		M-factor (acute) = 10.0
1,2-benzisothiazol-3(2H)-one	CAS No 2634-33-5 EC No 220-120-9 Index No 613-088-00-6 REACH Reg. No 01-2120761540-60-xxxx	< 0,05	Acute Tox. 4 / H302 Acute Tox. 2 / H330 Skin Irrit. 2 / H315 Eye Dam. 1 / H318 Skin Sens. 1 / H317 Aquatic Acute 1 / H400 Aquatic Chronic 2 / H411	Skin Sens. 1; H317: C ≥ 0,05 %	

Name of substance	Identifier	Wt%	Classification acc. to GHS	Specific Conc. Limits	M-Factors
2-methyl-2H-isothiazol-3-one	CAS No 2682-20-4 EC No 220-239-6 REACH Reg. No 01-2120764690-50-xxxx	< 0,0015	Acute Tox. 3 / H301 Acute Tox. 3 / H311 Acute Tox. 2 / H330 Skin Corr. 1B / H314 Eye Dam. 1 / H318 Skin Sens. 1A / H317 Aquatic Acute 1 / H400 Aquatic Chronic 1 / H410 EUH071	Skin Sens. 1A; H317: C ≥ 0,0015 %	M-factor (acute) = 10.0
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	CAS No 55965-84-9 Index No 613-167-00-5 REACH Reg. No 01-2120764691-48-xxxx	< 0,0015	Acute Tox. 3 / H301 Acute Tox. 2 / H310 Acute Tox. 2 / H330 Skin Corr. 1B / H314 Eye Dam. 1 / H318 Skin Sens. 1 / H317 Aquatic Acute 1 / H400 Aquatic Chronic 1 / H410 EUH071	Skin Corr. 1B; H314: C ≥ 0,6 % Skin Irrit. 2; H315: 0,06 % ≤ C < 0,6 % Eye Dam. 1; H318: C ≥ 0,6 % Eye Irrit. 2; H319: 0,06 % ≤ C < 0,6 % Skin Sens. 1; H317: C ≥ 0,0015 %	M-factor (acute) = 100.0 M-factor (chronic) = 100.0

Additional information

IPBC (CAS:55406-53-6): STOT RE 1 (Larynx/ Inhalation).

For full text of abbreviations: see SECTION 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General notes

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

Following inhalation

Remove casualty to fresh air and keep warm and at rest. In case of accident or if you feel unwell, seek medical advice immediately (show the label or safety data sheet where possible). Provide fresh air.

Following skin contact

After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water and soap. In case of skin reactions, consult a physician.

Following eye contact

Rinse immediately carefully and thoroughly with eye shower or water. If eye irritation persists: Get medical advice/attention.

Following ingestion

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

4.2 Most important symptoms and effects, both acute and delayed

May produce an allergic reaction.

4.3 Indication of any immediate medical attention and special treatment needed

none

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Carbon dioxide (CO2), Alcohol resistant foam, Water spray, Water mist, BC-powder, Sand

Unsuitable extinguishing media

Water jet

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products

Nitrogen oxides (NOx), Carbon monoxide (CO), Carbon dioxide (CO2)

5.3 Advice for firefighters

In case of fire toxic gases may be formed. In case of fire and/or explosion do not breathe fumes. Wear self-contained breathing apparatus. Do not allow firefighting water to enter drains or water courses. Fight fire with normal precautions from a reasonable distance. Collect contaminated firefighting water separately.

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

Use personal protection equipment. Wear breathing apparatus if exposed to vapours/dust/spray/gases.

6.2 Environmental precautions

Keep away from drains, surface and ground water. Prevent spread over a wide area (e.g. by containment or oil barriers). Retain contaminated washing water and dispose of it.

6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

Take up mechanically, 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.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Recommendations

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

Use only in well-ventilated areas. Do not breathe gas/fumes/vapour/spray.

Advice on general occupational hygiene

Avoid contact with skin and eyes. Wash hands after use. Keep away from food, drink and animal feedingstuffs. Never place chemicals in containers that are normally used for food or drink.

7.2 Conditions for safe storage, including any incompatibilities

Keep only in original container.

Protect against external exposure, such as

Frost

Storage class (LGK)
TRGS 510

LGK 12 (non-combustible liquids)

7.3 Specific end use(s)

Industry or sector specific available guidance(s)
GISCODE: HSW10 Holzschutzmittel, wasserbasiert, organische Wirkstoffe.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values (Workplace Exposure Limits)

Occupational exposure limit values (Workplace Exposure Limits)

Country	Name of agent	CAS No	Identifier	TWA [ppm]	TWA [mg/m³]	STEL [ppm]	STEL [mg/m³]	Ceiling-C [ppm]	Ceiling-C [mg/m³]	Notation	Source
DE	titanium dioxide	13463-67-7	MAK		0,3		2,4			r, mult-density	DFG
DE	Polyethylene glycol (PEG 200-600)	25322-68-3	AGW		200		400			Y, i	TRGS 900
DE	Polyethylene glycols (PEG) (average molecular weight 200-600)	25322-68-3	MAK		250		500			i	DFG
DE	3-iodo-2-propynyl butylcarbamate	55406-53-6	MAK	0,005	0,058	0,01	0,116			va	DFG
DE	3-iodo-2-propynyl butylcarbamate	55406-53-6	AGW	0,005	0,058	0,01	0,116			va, Sh, Y	TRGS 900
DE	reaction mass of: 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H -isothiazol-3-one (3:1)	55965-84-9	MAK		0,2		0,4			i	DFG

Notation
Ceiling-C ceiling value is a limit value above which exposure should not occur
i inhalable fraction

Notation

mult-density	multiplied by the material density
r	respirable fraction
Sh	skin-sensitising substances
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)
va	as vapours and aerosols
Y	a risk of developmental toxicity does not need to be expected if the occupational exposure limit value and the biological limit value (BGW) are adhered to

Relevant DNELs of components of the mixture

Relevant DNELs of components of the mixture

Name of substance	CAS No	Endpoint	Threshold level	Protection goal, route of exposure	Used in	Exposure time
3-iodo-2-propynyl butylcarbamate	55406-53-6	DNEL	0,023 mg/m³	human, inhalatory	worker (industry)	chronic - systemic effects
3-iodo-2-propynyl butylcarbamate	55406-53-6	DNEL	0,07 mg/m³	human, inhalatory	worker (industry)	acute - systemic effects
3-iodo-2-propynyl butylcarbamate	55406-53-6	DNEL	1,16 mg/m³	human, inhalatory	worker (industry)	chronic - local effects
3-iodo-2-propynyl butylcarbamate	55406-53-6	DNEL	1,16 mg/m³	human, inhalatory	worker (industry)	acute - local effects
3-iodo-2-propynyl butylcarbamate	55406-53-6	DNEL	2 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
1,2-benzisothiazol-3(2H)-one	2634-33-5	DNEL	6,81 mg/m³	human, inhalatory	worker (industry)	chronic - systemic effects
1,2-benzisothiazol-3(2H)-one	2634-33-5	DNEL	0,966 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
2-methyl-2H-isothiazol-3-one	2682-20-4	DNEL	0,021 mg/m³	human, inhalatory	worker (industry)	chronic - local effects
2-methyl-2H-isothiazol-3-one	2682-20-4	DNEL	0,043 mg/m³	human, inhalatory	worker (industry)	acute - local effects
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	55965-84-9	DNEL	0,02 mg/m³	human, inhalatory	worker (industry)	chronic - local effects
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	55965-84-9	DNEL	0,04 mg/m³	human, inhalatory	worker (industry)	acute - local effects

Relevant PNECs of components of the mixture

Relevant PNECs of components of the mixture

Name of substance	CAS No	Endpoint	Threshold level	Organism	Environmental compartment	Exposure time
3-iodo-2-propynyl butylcarbamate	55406-53-6	PNEC	0,001 mg/l	aquatic organisms	freshwater	short-term (single instance)

Relevant PNECs of components of the mixture

Name of substance	CAS No	Endpoint	Threshold level	Organism	Environmental compartment	Exposure time
3-iodo-2-propynyl butylcarbamate	55406-53-6	PNEC	0 mg/l	aquatic organisms	marine water	short-term (single instance)
3-iodo-2-propynyl butylcarbamate	55406-53-6	PNEC	0,44 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
3-iodo-2-propynyl butylcarbamate	55406-53-6	PNEC	0,017 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
3-iodo-2-propynyl butylcarbamate	55406-53-6	PNEC	0,002 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
3-iodo-2-propynyl butylcarbamate	55406-53-6	PNEC	0,005 mg/kg	terrestrial organisms	soil	short-term (single instance)
1,2-benzisothiazol-3(2H)-one	2634-33-5	PNEC	4,03 µg/l	aquatic organisms	freshwater	short-term (single instance)
1,2-benzisothiazol-3(2H)-one	2634-33-5	PNEC	0,403 µg/l	aquatic organisms	marine water	short-term (single instance)
1,2-benzisothiazol-3(2H)-one	2634-33-5	PNEC	1,03 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
1,2-benzisothiazol-3(2H)-one	2634-33-5	PNEC	49,9 µg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
1,2-benzisothiazol-3(2H)-one	2634-33-5	PNEC	4,99 µg/kg	aquatic organisms	marine sediment	short-term (single instance)
1,2-benzisothiazol-3(2H)-one	2634-33-5	PNEC	3 mg/kg	terrestrial organisms	soil	short-term (single instance)
2-methyl-2H-isothiazol-3-one	2682-20-4	PNEC	3,39 µg/l	aquatic organisms	freshwater	short-term (single instance)
2-methyl-2H-isothiazol-3-one	2682-20-4	PNEC	3,39 µg/l	aquatic organisms	marine water	short-term (single instance)
2-methyl-2H-isothiazol-3-one	2682-20-4	PNEC	0,23 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
2-methyl-2H-isothiazol-3-one	2682-20-4	PNEC	0,047 mg/kg	terrestrial organisms	soil	short-term (single instance)
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	55965-84-9	PNEC	3,39 µg/l	aquatic organisms	freshwater	short-term (single instance)
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	55965-84-9	PNEC	3,39 µg/l	aquatic organisms	marine water	short-term (single instance)
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	55965-84-9	PNEC	0,23 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)

Relevant PNECs of components of the mixture

Name of substance	CAS No	Endpoint	Threshold level	Organism	Environmental compartment	Exposure time
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	55965-84-9	PNEC	0,027 $^{mg}/_{kg}$	aquatic organisms	freshwater sediment	short-term (single instance)
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	55965-84-9	PNEC	0,027 $^{mg}/_{kg}$	aquatic organisms	marine sediment	short-term (single instance)
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	55965-84-9	PNEC	0,01 $^{mg}/_{kg}$	terrestrial organisms	soil	short-term (single instance)

8.2 Exposure controls

Technical measures and the application of suitable work processes have priority over personal protection equipment. Personal protective equipment shall be used when the risks cannot be avoided or sufficiently limited by technical means of collective protection or by measures, methods or procedures of work organization.

Appropriate engineering controls

Open windows, door, to allow sufficient ventilation. If this is not possible employ a fan to increase air exchange.

Individual protection measures (personal protective equipment)

Eye/face protection

Use safety goggle with side 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 together with the supplier of these gloves.

- Type of material

IIR: isobutene-isoprene (butyl) rubber, NBR: acrylonitrile-butadiene rubber

- Other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling. Chemikalienschutzhandschuhe dürfen nur in Ausnahmefällen länger als 4 Stunden getragen werden. Bereits regelmäßiges Schutzhandschuhtragen > 2 Stunden (sog. Feuchtarbeit) verpflichtet den Arbeitgeber, ein Angebot arbeitsmedizinischer Vorsorgeuntersuchungen an den Arbeitnehmer zu richten. DGUV Information 212-007 (Chemikalienschutzhandschuhe): http://publikationen.dguv.de/dguv/pdf/10002/i-868.pdf . Hautschutzplan z.B. für Schädlingsbekämpfer der Berufsgenossenschaft für Gesundheit und Wohlfahrtspflege (bgw): https://www.bgw-online.de/DE/Medien-Service/Medien-Center/Medientypen/BGW-Broschueren/Hautschutzplaene/BGW06-13-150_Hautschutzplan-Schaedlingsbekaempfung.html.

Respiratory protection

Usually no personal respirative protection necessary
Respiratory protection necessary at: aerosol or mist formation, during spraying wear suitable respiratory equipment, particulate filter device (EN 143)

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	various
Odour	faintly perceptible
Melting point/freezing point	not determined
Boiling point or initial boiling point and boiling range	not determined
Flammability	non-combustible
Lower and upper explosion limit	not determined
Flash point	not determined
Auto-ignition temperature	not determined
Decomposition temperature	not relevant
pH (value)	ca. 8,7

Solubility(ies)

Water solubility	miscible in any proportion

Partition coefficient

Partition coefficient n-octanol/water (log value)	not determined

Vapour pressure	not determined

Density and/or relative density

Density	ca. 1,01 g/cm³ at 25 °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

Miscibility	Completely miscible with water.
Solid content	ca. 16 %

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

No known hazardous reactions.

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

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

The classification criteria for these hazard classes are not met.

Acute toxicity estimate (ATE) of components of the mixture

Name of substance	CAS No	Exposure route	ATE
3-iodo-2-propynyl butylcarbamate	55406-53-6	oral	1.795 $^{mg}/_{kg}$
3-iodo-2-propynyl butylcarbamate	55406-53-6	inhalation: dust/mist	0,5 $^{mg}/_{l}$/4h
1,2-benzisothiazol-3(2H)-one	2634-33-5	oral	670 $^{mg}/_{kg}$
1,2-benzisothiazol-3(2H)-one	2634-33-5	inhalation: dust/mist	0,05 $^{mg}/_{l}$/4h
2-methyl-2H-isothiazol-3-one	2682-20-4	oral	120 $^{mg}/_{kg}$
2-methyl-2H-isothiazol-3-one	2682-20-4	dermal	242 $^{mg}/_{kg}$
2-methyl-2H-isothiazol-3-one	2682-20-4	inhalation: dust/mist	0,11 $^{mg}/_{l}$/4h
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	55965-84-9	oral	64 $^{mg}/_{kg}$

Acute toxicity estimate (ATE) of components of the mixture			
Name of substance	**CAS No**	**Exposure route**	**ATE**
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	55965-84-9	dermal	87,12 $^{mg}/_{kg}$
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	55965-84-9	inhalation: vapour	0,5 $^{mg}/_{l}$/4h
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	55965-84-9	inhalation: dust/mist	0,33 $^{mg}/_{l}$/4h

Skin corrosion/irritation

The classification criteria for this hazard class are not met.

Serious eye damage/eye irritation

The classification criteria for this hazard class are not met.

Respiratory or skin sensitisation

Contains 1,2-benzisothiazol-3(2H)-one, reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1), 3-iodo-2-propynyl butylcarbamate, 2-methyl-2H-isothiazol-3-one. May produce an allergic reaction.

Germ cell mutagenicity

The classification criteria for this hazard class are not met.

Carcinogenicity

The classification criteria for this hazard class are not met.

Reproductive toxicity

The classification criteria for this hazard class are not met.

Specific target organ toxicity - single exposure

The classification criteria for this hazard class are not met.

Specific target organ toxicity - repeated exposure

The classification criteria for this hazard class are not met.

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: Harmful to aquatic life with long lasting effects.

Aquatic toxicity (chronic) of components of the mixture					
Name of substance	**CAS No**	**Endpoint**	**Value**	**Species**	**Exposure time**
3-iodo-2-propynyl butylcarbamate	55406-53-6	ErC50	0,1 $^{mg}/_{l}$	algae	120 h
3-iodo-2-propynyl butylcarbamate	55406-53-6	EC50	44 $^{mg}/_{l}$	microorganisms	3 h

Aquatic toxicity (chronic) of components of the mixture

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
2-methyl-2H-isothiazol-3-one	2682-20-4	EC50	1,4 mg/l	aquatic invertebrates	21 d
2-methyl-2H-isothiazol-3-one	2682-20-4	ErC50	0,22 mg/l	algae	120 h
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	55965-84-9	LC50	0,07 mg/l	fish	14 d
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	55965-84-9	EC50	>0,18 mg/l	aquatic invertebrates	21 d
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	55965-84-9	ErC50	45,6 µg/l	algae	120 h

12.2 Persistence and degradability

Degradability of components of the mixture

Name of substance	CAS No	Process	Degradation rate	Time	Method	Source
3-iodo-2-propynyl butylcarbamate	55406-53-6	carbon dioxide generation	4 %	1 d		ECHA
2-methyl-2H-isothiazol-3-one	2682-20-4	carbon dioxide generation	54,1 %	29 d		ECHA
2-methyl-2H-isothiazol-3-one	2682-20-4	oxygen depletion	0 %	28 d		ECHA
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	55965-84-9	carbon dioxide generation	38,8 %	29 d		ECHA

12.3 Bioaccumulative potential

The product has not been tested.

Bioaccumulative potential of components of the mixture

Name of substance	CAS No	BCF	Log KOW	BOD5/COD
3-iodo-2-propynyl butylcarbamate	55406-53-6		2,81 (25 °C)	
1,2-benzisothiazol-3(2H)-one	2634-33-5		0,63 (pH value: 7, 10 °C)	

Bioaccumulative potential of components of the mixture				
Name of substance	**CAS No**	**BCF**	**Log KOW**	**BOD5/COD**
2-methyl-2H-isothiazol-3-one	2682-20-4	5,75	-0,486 (pH value: 7, 25 °C)	
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	55965-84-9	54	≥-0,34 – ≤0,63 (pH value: 7, 10 °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

None of the ingredients are listed.

12.7 Other adverse effects

Data are not available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste. Consult the appropriate local waste disposal expert about waste disposal.

Waste treatment-relevant information

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

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

Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

Relevant provisions relating to waste

List of wastes

- Product

03 02 05* other wood preservatives containing hazardous substances

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 not subject to transport regulations

14.2 UN proper shipping name not assigned

14.3 Transport hazard class(es) none

14.4 Packing group not assigned

14.5 Environmental hazards non-environmentally hazardous acc. to the dangerous goods regulations

14.6 Special precautions for user

There is no additional information.

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

not assigned

International Maritime Dangerous Goods Code (IMDG) - Additional information

Not subject to IMDG.

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

Not subject to ICAO-IATA.

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)

Restrictions according to REACH, Annex XVII

Dangerous substances with restrictions (REACH, Annex XVII)

Name of substance	Name acc. to inventory	CAS No	No
Koralan Holzöl Spezial	this product meets the criteria for classification in accordance with Regulation No 1272/2008/EC		3

List of substances subject to authorisation (REACH, Annex XIV) / SVHC - candidate list

none of the ingredients are listed

Seveso Directive

2012/18/EU (Seveso III)

No	Dangerous substance/hazard categories	Qualifying quantity (tonnes) for the application of lower and upper-tier requirements	Notes
	not assigned		

Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS) - Annex II

none of the ingredients are listed

Regulation 166/2006/EC concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)

none of the ingredients are listed

Water Framework Directive (WFD)

List of pollutants (WFD)

Name of substance	CAS No	Listed in	Remarks
Titanium dioxide		A)	
Titanium dioxide		A)	

Legend
A) Indicative list of the main pollutants

Regulation 98/2013/EU on the marketing and use of explosives precursors

none of the ingredients are listed

Regulation 111/2005/EC laying down rules for the monitoring of trade between the Community and third countries in drug precursors

none of the ingredients are listed

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
Self-classification (mixture; calculation rule)

Technical instructions on air quality control (Germany)

Number	Group of substances	Class	Conc.	Mass flow	Mass concentration	Notation
5.2.5	organic substances	class I	1 – < 5 wt%	0,1 $^{kg}/_{h}$	20 $^{mg}/_{m^3}$	3)
5.2.5	organic substances		≥ 25 wt%	0,5 $^{kg}/_{h}$	50 $^{mg}/_{m^3}$	3)

Notation
3) a total mass flow of 0.50 kg/h or a total mass concentration of 50 mg/m³, each of which to be indicated as total carbon, shall not be exceeded (except organic particulate matter)

Industry or sector specific available guidance(s)

BP 1081 (Vorbeugender Holzschutz: Grundmaßnahmen)
BP 1082 (Bekämpfender Holzschutz: Grundmaßnahmen) nur bei bekämpfenden Holzschutzmitteln
BP 2081 (Holzschutzmittel: Streichen, Rollen, Spachteln und Wischen)
BP 2082 (Holzschutzmittel: Bekämpfender Holzschutz in Sprühanwendungen)
BP 2083 (Anwendung von Holzschutzmitteln in offenen Anlagen)
BP 2084 (Anwendung von Holzschutzmitteln in geschlossenen Anlagen)
https://www.baua.de/DE/Themen/Arbeitsgestaltung-im-Betrieb/Gefahrstoffe/EMKG/EMKG-Schutzleitfaeden.html
DGUV Information 209-043 (Holzschutzmittel Handhabung und sicheres Arbeiten)
TRGS 401: Gefährdung durch Hautkontakt, Ermittlung - Beurteilung – Maßnahmen) ist zu beachten
TRGS 553 (Holzstaub): Bei der Weiterverarbeitung von behandeltem Holz (z.B. Zuschneiden, Schleifen) ist der Holzstaubgrenzwert von 2 mg/m³ gemäß TRGS 553 einzuhalten.

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
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)
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
Carc.	Carcinogenicity
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
Ceiling-C	Ceiling value
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
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
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
IATA	International Air Transport Association

Abbr.	Descriptions of used abbreviations
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	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
LC50	Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethality during a specified time interval
LGK	Lagerklasse (storage class according to TRGS 510, Germany)
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
Skin Sens.	Skin sensitisation
STEL	Short-term exposure limit
STOT RE	Specific target organ toxicity - repeated exposure
SVHC	Substance of Very High Concern
TRGS	Technische Regeln für GefahrStoffe (technical rules for hazardous substances, Germany)
TRGS 900	Arbeitsplatzgrenzwerte (TRGS 900)
TWA	Time-weighted average
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
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H310	Fatal in contact with skin.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H330	Fatal if inhaled.
H331	Toxic if inhaled.
H351	Suspected of causing cancer.
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.

Disclaimer

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

Internal code

OBERMEIER 001311