# **Safety Data Sheet**



according to Regulation (EC) No. 1907/2006 (REACH) (This safety data sheet is for information only and does not comply with the official language requirements of article 31 (5) of REACH.)

#### Touch Coat GRANUM EXTRA basalte

Version number: 1.0 First version: 28.07.2025

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

1.1 Product identifier

Trade name <u>Touch Coat GRANUM EXTRA basalte</u>

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

Relevant identified uses Coating

1.3 Details of the supplier of the safety data sheet

RHEINZINK GmbH & Co. KG

Bahnhofstraße 90

Telephone: +49 2363 605-0

Telefax: +49 2363 605-201

45711 Datteln

Germany

Website: www.rheinzink.de

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

1.4 Emergency telephone number

Poison centre		
Country	Name	Telephone
Germany	Giftzentrale Bonn	+49 (0) 228 19240

As above or nearest toxicological information centre.

#### **SECTION 2: Hazards identification**

#### 2.1 Classification of the substance or mixture

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

This mixture does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC.

#### 2.2 Label elements

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

Signal word Not required.

Pictograms Not required.

Germany: en Page: 1 / 23

Version number: 1.0 First version: 28.07.2025

#### 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). May produce an

allergic reaction.

**EUH210** Safety data sheet available on request.

**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

Does not contain a PBT-/vPvB-substance at a concentration of  $\geq 0,1\%$ .

#### **Endocrine disrupting properties**

Does not contain an endocrine disruptor (ED) at a concentration of  $\geq$  0,1%.

# **SECTION 3: Composition/information on ingredients**

#### 3.1 Substances

Not relevant (mixture).

#### 3.2 Mixtures

#### Description of the mixture

#### **Hazardous ingredients** Name of sub-**Identifier** Wt% Classification acc. to **Pictograms** Notes stance **GHS** CAS No 3-<5 Skin Irrit. 2 / H315 ethyl 4-oxovalerate 539-88-8 Eye Irrit. 2 / H319 EC No 208-728-2 REACH Reg. No 01-2120765759-33-xxxx GHS-HC 1,2-benzisothiazol-CAS No 0,01 - < 0,1 Acute Tox. 4 / H302 3(2H)-one 2634-33-5 Acute Tox. 2 / H330 Skin Irrit. 2 / H315 EC No Eye Dam. 1 / H318 220-120-9 Skin Sens. 1A / H317 Aquatic Acute 1 / H400 Index No Aquatic Chronic 1 / H410 613-088-00-6 reaction mass of 5-CAS No < 0,01 Acute Tox. 3 / H301 R GHS-HC 55965-84-9 chloro-2-methyl-2H-Acute Tox. 2 / H310 isothiazol-3-one and Acute Tox. 2 / H330 2-methyl-2H-iso-Index No Skin Corr. 1C / H314 thiazol-3-one (3:1) 613-167-00-5 Eye Dam. 1 / H318 Skin Sens. 1A / H317

Germany: en Page: 2 / 23

Version number: 1.0 First version: 28.07.2025

Hazardous ingredients									
Name of sub- stance	Identifier	Wt%	Classification acc. to GHS	Pictograms	Notes				
			Aquatic Acute 1 / H400 Aquatic Chronic 1 / H410 EUH071						

#### Notes

B: Some substances (acids, bases, etc.) are placed on the market in aqueous solutions at various concentrations and, therefore, these solutions require different classification and labelling since the hazards vary at different concentrations. In Part 3 entries with Note B have a general designation of the following type: 'nitric acid ... %'. In this case the supplier must state the percentage concentration of the solution on the label. Unless otherwise stated, it is assumed that the percentage concentration is calculated on a weight/weight basis.

GHS- Harmonised classification (the classification of the substance corresponds to the entry in the list according to

HC: 1272/2008/EC, Annex VI)

Name of substance	Specific Conc. Limits	M-Factors	ATE	Exposure route
1,2-benzisothiazol-3(2H)- one	Skin Sens. 1A; H317: C ≥ 0,036 %	M-factor (acute) = 1 M-factor (chronic) = 1	450 <sup>mg</sup> / <sub>kg</sub> 0,21 <sup>mg</sup> / <sub>l</sub> /4h	oral inhalation: dust/mist
reaction mass of 5- chloro-2-methyl-2H-iso- thiazol-3-one and 2- methyl-2H-isothiazol-3- one (3:1)	Skin Corr. 1C; 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. 1A; H317: C ≥ 0,0015 %	M-factor (acute) = 100 M-factor (chronic) = 100	66 <sup>mg</sup> / <sub>kg</sub> 87,12 <sup>mg</sup> / <sub>kg</sub> 0,171 <sup>mg</sup> / <sub>l</sub> /4h	oral dermal inhalation: dust/mist

#### Remarks

For full text of H-phrases: see SECTION 16 Contains: nanomaterial, nanoform

#### **SECTION 4: First aid measures**

# 4.1 Description of first aid measures

#### **General notes**

Self-protection of the first aider.

Remove affected person from the danger area and lay down.

Do not leave affected person unattended.

In all cases of doubt, or when symptoms persist, seek medical advice.

#### Following inhalation

Provide fresh air.

#### Following skin contact

Wash with plenty of soap and water.

#### Following eye contact

Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

Germany: en Page: 3 / 23

Version number: 1.0 First version: 28.07.2025

#### Following ingestion

Rinse mouth. Do not induce vomiting.

Get medical advice/attention if you feel unwell.

#### Notes for the doctor

None.

#### 4.2 Most important symptoms and effects, both acute and delayed

This information is not available.

#### 4.3 Indication of any immediate medical attention and special treatment needed

None.

# **SECTION 5: Firefighting measures**

#### 5.1 Extinguishing media

#### Suitable extinguishing media

water spray, alcohol resistant foam, fire extinguishing powder, carbon dioxide (CO<sub>2</sub>), co-ordinate fire-fighting measures to the fire surroundings

#### Unsuitable extinguishing media

water jet

#### 5.2 Special hazards arising from the substance or mixture

Hazardous decomposition products: Section 10.

#### **Hazardous combustion products**

nitrogen oxides (NO<sub>x</sub>), carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>), hydrogen chloride (HCl)

#### 5.3 Advice for firefighters

Non-combustible.

Keep containers cool with water spray.

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.

#### Special protective equipment for firefighters

Self-contained breathing apparatus (EN 133)

#### **SECTION 6: Accidental release measures**

#### 6.1 Personal precautions, protective equipment and emergency procedures

#### For non-emergency personnel

Remove persons to safety.

Wearing of suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing.

#### For emergency responders

Wear breathing apparatus if exposed to vapours/dust/spray/gases.

Germany: en Page: 4 / 23

Version number: 1.0 First version: 28.07.2025

#### 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

Bunding.

Covering of drains.

#### Advice on how to clean up a spill

Collect spillage.

Absorbent material (e.g. sand, diatomaceous earth, acid binder, universal binder, sawdust, etc.).

#### **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

Avoid contact with skin and eyes.

Do not breathe vapour/spray.

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

Use local and general ventilation.

#### Measures to protect the environment

Avoid release to the environment.

Do not empty into drains; dispose of this material and its container at hazardous or special waste collection point.

#### Advice on general occupational hygiene

Do not eat, drink and smoke in work areas.

Wash hands after use.

Preventive skin protection (barrier creams/ointments) is recommended.

Remove contaminated clothing and protective equipment before entering eating areas.

#### 7.2 Conditions for safe storage, including any incompatibilities

#### Flammability hazards

None.

#### **Incompatible substances or mixtures**

Germany: en Page: 5 / 23

Version number: 1.0 First version: 28.07.2025

Incompatible materials: see section 10.

#### Protect against external exposure, such as

frost

#### Consideration of other advice

Keep away from food, drink and animal feedingstuffs.

#### **Ventilation requirements**

Provision of sufficient ventilation.

#### Specific designs for storage rooms or vessels

Keep container tightly closed and in a well-ventilated place.

Storage temperature

recommended storage temperature: <35 °C

#### **Packaging compatibilities**

Keep only in original container.

## 7.3 Specific end use(s)

No information available.

# **SECTION 8: Exposure controls/personal protection**

#### 8.1 Control parameters

# Occupational exposure limit values (Workplace Exposure Limits)

Coun try	Name of agent	CAS No	Iden- tifier	TWA [ppm]	TWA [mg/m³]	STEL [ppm]	STEL [mg/m³]	Nota- tion	Source
DE	titanium dioxide	13463- 67-7	MAK	-	0,3	-	2,4	r, mult- dens- ity, ex- uf-dust	DFG
DE	reaction mass of: 5-chloro-2- methyl-2H-iso- thiazol-3-one and 2-methyl-2H -iso- thiazol-3-one (3:1)	55965- 84-9	MAK	-	0,2	-	0,4	-	DFG
DE	silica, amorphous	7631-86- 9	AGW	-	1	-	8	i, DE- AGW-2, Y	TRGS 900
DE	silica, amorphous	7631-86- 9	MAK	-	0,02	-	0,16	r	DFG

#### **Notation**

DE-AGW-2 Colloidal amorphous silica (7631-86-9) including fumed silica and produced in wet process silica (precipitated

silica, silica gel).

ex-uf-dust except ultrafine particles

i inhalable fraction

mult-dens- multiplied by the material density

Germany: en Page: 6 / 23

Version number: 1.0 First version: 28.07.2025

#### **Notation**

ity

r respirable fraction

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)

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

#### **Human health values**

Relevant DNELs	Relevant DNELs of components									
Name of sub- stance	CAS No	End- point	Threshol d level	Protection goal, route of exposure	Used in	Exposure time				
1,2-benzisothiazol- 3(2H)-one	2634-33-5	DNEL	6,81 mg/m³	human, inhalat- ory	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				
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, inhalat- ory	worker (industry)	chronic - local ef- fects				

#### **Environmental values**

#### **Relevant PNECs of components** Name of substance **CAS No Endpoint Threshold level Environmental com**partment **PNEC** $4,03 \, \mu g/I$ 1,2-benzisothiazol-3(2H)-one 2634-33-5 freshwater 1,2-benzisothiazol-3(2H)-one 2634-33-5 **PNEC** $0,403 \, \mu g/I$ marine water 2634-33-5 **PNEC** 1,03 <sup>mg</sup>/<sub>I</sub> 1,2-benzisothiazol-3(2H)-one sewage treatment plant (STP) **PNEC** $49,9 \, ^{\mu g}/_{kg}$ 1,2-benzisothiazol-3(2H)-one 2634-33-5 freshwater sediment 1,2-benzisothiazol-3(2H)-one 2634-33-5 **PNEC** $4,99 \, ^{\mu g}/_{kg}$ marine sediment $3 \frac{mg}{kg}$ 1,2-benzisothiazol-3(2H)-one 2634-33-5 **PNEC** soil reaction mass of 5-chloro-2-55965-84-9 **PNEC** 3,39 <sup>µg</sup>/<sub>I</sub> freshwater methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)reaction mass of 5-chloro-2-55965-84-9 **PNEC** 3,39 <sup>µg</sup>/<sub>I</sub> marine water

Germany: en Page: 7 / 23

Version number: 1.0 First version: 28.07.2025

#### **Relevant PNECs of components**

Name of substance	CAS No	Endpoint	Threshold level	Environmental com- partment
methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)				
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 <sup>mg</sup> / <sub>l</sub>	sewage treatment plant (STP)
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 <sup>mg</sup> / <sub>kg</sub>	freshwater sediment
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 <sup>mg</sup> / <sub>kg</sub>	marine sediment
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 <sup>mg</sup> / <sub>kg</sub>	soil

# 8.2 Exposure controls

#### **Appropriate engineering controls**

Use local and general ventilation.

#### **Individual protection measures (personal protective equipment)**

#### **Eye/face protection**

Wear eye/face protection. (EN 166)

#### **Hand protection**

Protective gloves								
Material	Material thickness	Breakthrough times of the glove material						
NBR: acrylonitrile-butadiene rubber	no information available	no information available						

Wear suitable gloves.

Chemical protection gloves are suitable, which are tested according to EN 374.

Check leak-tightness/impermeability prior to use.

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.

#### **Body protection**

Protective clothing against liquid chemicals.

(EN 13832, EN 340, EN 13034, EN 14605).

Germany: en Page: 8 / 23

Version number: 1.0 First version: 28.07.2025

# **Respiratory protection**

In case of inadequate ventilation wear respiratory protection.

Type: A-P2 (combined filters against particles and organic gases and vapours, colour code:

Brown/White).

(EN 136, EN 140, EN 14387, EN 143, EN 149).

#### **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

(viscous liquid)

**Colour** black

**Odour** characteristic

Melting point/freezing point not determined

Boiling point or initial boiling point and boiling not determined

range (constituents: cas# 539-88-8: 93-94°C)

**Flammability** non-combustible

Lower and upper explosion limit not determined

**Flash point** not determined

(constituents: cas# 539-88-8: 90°C)

Auto-ignition temperature not determined

(constituents: cas# 2634-33-5: >400°C)

**Decomposition temperature** not relevant

**pH (value)** 7,4 – 7,9

**Kinematic viscosity** >200 S/DIN 4mm at 22 °C

**Dynamic viscosity** not determined

Solubility(ies)

Water solubility not miscible in any proportion

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

**Vapour pressure** not determined

Density and/or relative density

Density 1,1 – 1,2 <sup>g</sup>/<sub>cm³</sub> at 20 °C

Relative vapour density information on this property is not available

Germany: en Page: 9 / 23

Version number: 1.0 First version: 28.07.2025

Particle characteristics not relevant

(liquid)

contains: nanoform, nanomaterial

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 43 – 46 %

# **SECTION 10: Stability and reactivity**

# 10.1 Reactivity

This material is not reactive under normal ambient conditions.

#### 10.2 Chemical stability

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

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

acids, bases, 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

#### **Classification procedure**

If not otherwise specified the classification is based on:

Ingredients of the mixture (additivity formula).

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

This mixture does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC.

#### **Acute toxicity**

Test data are not available for the complete mixture.

Germany: en Page: 10 / 23

Version number: 1.0 First version: 28.07.2025

Acute toxicity of com	ponents						
Name of substance	CAS No	Expos- ure route	End- point	Value	Species	Method	Source
ethyl 4-oxovalerate	539-88-8	oral	LD50	>2.000 <sup>mg</sup> / <sub>kg</sub>	rat	-	ECHA Chem
ethyl 4-oxovalerate	539-88-8	dermal	LD50	>5.000 <sup>mg</sup> / <sub>kg</sub>	rabbit	-	Food and Chemical Toxicology. Vol. 20, Pg. 679, 1982
1,2-benzisothiazol-3(2H)- one	2634-33-5	oral	LD50	490 <sup>mg</sup> /	rat	OECD Guideline 401	ЕСНА
1,2-benzisothiazol-3(2H)- one	2634-33-5	dermal	LD0	>2.000 <sup>mg</sup> / <sub>kg</sub>	rat	OECD Guideline 402	ЕСНА
reaction mass of 5- chloro-2-methyl-2H-iso-	55965-84-9	oral	LD50	66 <sup>mg</sup> / <sub>kg</sub>	rat	EPA OPP 81- 1	ECHA

LD50

LC50

dermal

inhala-

tion:

dust/mis

t

87,12 <sup>mg</sup>

 $l_{kq}$ 

0.171 <sup>mg</sup>

/<sub>I</sub>/4h

rabbit,

male

rat

OECD

Guideline

403

**ECHA** 

**ECHA** 

#### Skin corrosion/irritation

thiazol-3-one and 2methyl-2H-isothiazol-3one (3:1)

reaction mass of 5-

chloro-2-methyl-2H-iso-

thiazol-3-one and 2methyl-2H-isothiazol-3one (3:1)

reaction mass of 5-

chloro-2-methyl-2H-iso-

thiazol-3-one and 2-

methyl-2H-isothiazol-3-

one (3:1)

Shall not be classified as corrosive/irritant to skin.

55965-84-9

55965-84-9

#### Serious eye damage/eye irritation

Acute toxicity of components

Shall not be classified as seriously damaging to the eye or eye irritant.

#### 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). May produce an allergic reaction.

#### Germ cell mutagenicity

Classification could not be established because:

Data are lacking, inconclusive, or conclusive but not sufficient for classification.

#### Carcinogenicity

Classification could not be established because:

Germany: en Page: 11 / 23

Version number: 1.0 First version: 28.07.2025

Data are lacking, inconclusive, or conclusive but not sufficient for classification.

#### Reproductive toxicity

Classification could not be established because:

Data are lacking, inconclusive, or conclusive but not sufficient for classification.

#### Specific target organ toxicity - single exposure

Classification could not be established because:

Data are lacking, inconclusive, or conclusive but not sufficient for classification.

#### Specific target organ toxicity - repeated exposure

Classification could not be established because:

Data are lacking, inconclusive, or conclusive but not sufficient for classification.

#### **Aspiration hazard**

Shall not be classified as presenting an aspiration hazard.

#### 11.2 Information on other hazards

#### **Endocrine disrupting properties**

Does not contain an endocrine disruptor (ED) at a concentration of  $\geq 0.1\%$ .

# **SECTION 12: Ecological information**

# 12.1 Toxicity

#### **Aquatic toxicity (acute)**

Based on available data, the classification criteria are not met.

# Aquatic toxicity (acute) of components

Name of sub- stance	CAS No	Endpoint	Expos- ure time	Value	Species	Method	Source
ethyl 4-oxova- lerate	539-88-8	LC50	96 h	1,614 <sup>mg</sup> / <sub>l</sub>	zebra fish (Danio rerio)	ISO 7346-1	ECHA Chem
ethyl 4-oxova- lerate	539-88-8	EC50	72 h	932,1 <sup>mg</sup> / <sub>l</sub>	algae (pseudokirch- neriella sub- capitata)	OECD Guideline 201	ECHA Chem
1,2-benziso- thiazol-3(2H)- one	2634-33-5	LC50	96 h	2,15 <sup>mg</sup> / <sub>l</sub>	rainbow trout (Oncorhynchus mykiss)	OECD Guideline 203	ECHA
1,2-benziso- thiazol-3(2H)- one	2634-33-5	EC50	48 h	2,9 <sup>mg</sup> / <sub>l</sub>	daphnia magna	OECD Guideline 202	ECHA
1,2-benziso- thiazol-3(2H)- one	2634-33-5	ErC50	72 h	110 <sup>µg</sup> / <sub>I</sub>	algae (pseudokirch- neriella sub- capitata)	OECD Guideline 201	ECHA
1,2-benziso- thiazol-3(2H)-	2634-33-5	EbC50	72 h	70 <sup>µg</sup> / <sub>I</sub>	algae (pseudokirch-	OECD Guideline	ECHA

Germany: en Page: 12 / 23

Version number: 1.0 First version: 28.07.2025

Name of sub- stance	CAS No	Endpoint	Expos- ure time	Value	Species	Method	Source
one					neriella sub- capitata)	201	
reaction mass of 5-chloro-2- methyl-2H-iso- thiazol-3-one and 2-methyl- 2H-isothiazol-3- one (3:1)	55965-84-9	LC50	96 h	0,19 <sup>mg</sup> / <sub>l</sub>	rainbow trout (Oncorhynchus mykiss)	EPA OPP 72-1	ECHA
reaction mass of 5-chloro-2- methyl-2H-iso- thiazol-3-one and 2-methyl- 2H-isothiazol-3- one (3:1)	55965-84-9	EC50	48 h	0,007 <sup>mg</sup> / <sub>1</sub>	crustacea: Acartia tonsa		ECHA
reaction mass of 5-chloro-2- methyl-2H-iso- thiazol-3-one and 2-methyl- 2H-isothiazol-3- one (3:1)	55965-84-9	ErC50	72 h	6,3 <sup>µg</sup> / <sub>l</sub>	algae (Skelet- onema cost- atum)	OECD Guideline 201	ECHA

# Aquatic toxicity (chronic)

Based on available data, the classification criteria are not met.

# Aquatic toxicity (chronic) of components

Name of sub- stance	CAS No	Endpoint	Expos- ure time	Value	Species	Method	Source
1,2-benziso- thiazol-3(2H)- one	2634-33-5	EC50	3 h	12,8 <sup>mg</sup> / <sub>l</sub>	activated sludge of a pre- dominantly do- mestic sewage	OECD Guideline 209	ECHA
1,2-benziso- thiazol-3(2H)- one	2634-33-5	NOEC	3 h	10,3 <sup>mg</sup> / <sub>l</sub>	activated sludge of a pre- dominantly do- mestic sewage	OECD Guideline 209	ECHA
reaction mass of 5-chloro-2- methyl-2H-iso- thiazol-3-one and 2-methyl- 2H-isothiazol-3- one (3:1)	55965-84-9	EC50	21 d	>0,18 <sup>mg</sup> / <sub>l</sub>	daphnia magna	EPA OPP 72-4	ECHA
reaction mass	55965-84-9	ErC50	120 h	45,6 <sup>µg</sup> / <sub>I</sub>	algae	OECD	ECHA

Germany: en Page: 13 / 23

Version number: 1.0 First version: 28.07.2025

Name of sub- stance	CAS No	Endpoint	Expos- ure time	Value	Species	Method	Source
of 5-chloro-2- methyl-2H-iso- thiazol-3-one and 2-methyl- 2H-isothiazol-3- one (3:1)					(pseudokirch- neriella sub- capitata)	Guideline 201	
reaction mass of 5-chloro-2- methyl-2H-iso- thiazol-3-one and 2-methyl- 2H-isothiazol-3- one (3:1)	55965-84-9	NOEC	72 h	1,4 <sup>µg</sup> / <sub>l</sub>	algae (pseudokirch- neriella sub- capitata)	OECD Guideline 201	ECHA
reaction mass of 5-chloro-2- methyl-2H-iso- thiazol-3-one and 2-methyl- 2H-isothiazol-3- one (3:1)	55965-84-9	NOEC	35 d	≥46,4 <sup>µg</sup> / <sub>I</sub>	zebra fish (Danio rerio)	OECD Guideline 210	ECHA
reaction mass of 5-chloro-2- methyl-2H-iso- thiazol-3-one and 2-methyl- 2H-isothiazol-3- one (3:1)	55965-84-9	NOEC	21 d	11,1 <sup>µg</sup> / <sub> </sub>	daphnia magna	OECD Guideline 211	ECHA
reaction mass of 5-chloro-2- methyl-2H-iso- thiazol-3-one and 2-methyl- 2H-isothiazol-3- one (3:1)	55965-84-9	NOEC	3 h	0,91 <sup>mg</sup> / <sub>l</sub>	activated sludge of a pre- dominantly do- mestic sewage	OECD Guideline 209	ECHA
reaction mass of 5-chloro-2- methyl-2H-iso- thiazol-3-one and 2-methyl- 2H-isothiazol-3- one (3:1)	55965-84-9	LOEL	36 d	0,06 <sup>mg</sup> / <sub>l</sub>	fathead min- now (Pimephales promelas)	EPA OPP 72-4	ECHA
reaction mass of 5-chloro-2- methyl-2H-iso- thiazol-3-one and 2-methyl- 2H-isothiazol-3- one (3:1)	55965-84-9	LOEC	28 d	0,144 <sup>mg</sup> / <sub>I</sub>	rainbow trout (Oncorhynchus mykiss)	OECD Guideline 215	ECHA

Germany: en Page: 14 / 23

Version number: 1.0 First version: 28.07.2025

# 12.2 Persistence and degradability

# **Biodegradation**

Test data are not available for the complete mixture.

# **Degradability of components**

Name of substance	CAS No	Process	Degradation rate	Time	Method	Source
ethyl 4-oxova- lerate	539-88-8	oxygen deple- tion	72 %	28 d	OECD Guideline 301 F	ECHA Chem
1,2-benziso- thiazol-3(2H)- one	2634-33-5	carbon diox- ide generation	62 %	4 d	OECD Guideline 301 C	ECHA
reaction mass of 5-chloro-2- methyl-2H-iso- thiazol-3-one and 2-methyl- 2H-isothiazol- 3-one (3:1)	55965-84-9	carbon diox- ide generation	38,8 %	29 d	OECD Guideline 301 B	ECHA

#### **Persistence**

No data available.

# 12.3 Bioaccumulative potential

# **Bioaccumulative potential of components**

Name of substance	CAS No	ВСГ	Log KOW
ethyl 4-oxovalerate	539-88-8	-	0,324 (20 °C)
1,2-benzisothiazol-3(2H)- one	2634-33-5	6,62	0,63 (pH value: 7, 10 °C)
reaction mass of 5-chloro- 2-methyl-2H-isothiazol-3- one and 2-methyl-2H-iso- thiazol-3-one (3:1)	55965-84-9	54	≥-0,34 – ≤0,63 (pH value: 7, 10 °C)

# 12.4 Mobility in soil

No data available.

# 12.5 Results of PBT and vPvB assessment

Does not contain a PBT-/vPvB-substance at a concentration of  $\geq 0.1\%$ .

# 12.6 Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) at a concentration of  $\geq 0.1\%$ .

# 12.7 Other adverse effects

No data available.

# Remarks

Germany: en Page: 15 / 23

Version number: 1.0 First version: 28.07.2025

Wassergefährdungsklasse, WGK (water hazard class): 2. Keep away from drains, surface and ground water.

# **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

Dispose of contents/container in accordance with local/regional/national/international regulations.

#### Sewage disposal-relevant information

Do not empty into drains.

#### Waste treatment of containers/packagings

Completely emptied packages can be recycled.

Handle contaminated packages in the same way as the substance itself.

#### **Remarks**

Please consider the relevant national or regional provisions.

# **SECTION 14: Transport information**

14.1	UN number or ID number	not subject to transport regulations
14.2	UN proper shipping name	-
14.3	Transport hazard class(es)	-
14.4	Packing group	-
14.5	Environmental hazards	-
14.6	Special precautions for user	-
14.7	Maritime transport in bulk according to IMO instruments	-

# **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

Name	Name acc. to inventory	CAS No	Restriction
reaction mass of 5-chloro-2-methyl-2H- isothiazol-3-one and 2-methyl-2H-iso- thiazol-3-one (3:1)	substances in tattoo inks and perman- ent make-up	-	R75
titanium dioxide	substances in tattoo inks and perman- ent make-up	-	R75
ethyl 4-oxovalerate	this product meets the criteria for classification in accordance with Regulation	-	R3

Germany: en Page: 16 / 23

Version number: 1.0 First version: 28.07.2025

Name	Name acc. to inventory	CAS No	Restriction
	No 1272/2008/EC		
carbon black	substances in tattoo inks and perman- ent make-up	-	R75

#### Legend

- R3 1. Shall not be used in:
  - ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays,
  - tricks and jokes,
  - games for one or more participants, or any article intended to be used as such, even with ornamental aspects,
  - 2. Articles not complying with paragraph 1 shall not be placed on the market.
  - 3. Shall not be placed on the market if they contain a colouring agent, unless required for fiscal reasons, or perfume, or both, if they:
  - can be used as fuel in decorative oil lamps for supply to the general public, and
  - present an aspiration hazard and are labelled with H304.
  - 4. Decorative oil lamps for supply to the general public shall not be placed on the market unless they conform to the European Standard on Decorative oil lamps (EN 14059) adopted by the European Committee for Standardisation (CEN).
  - 5. Without prejudice to the implementation of other Union provisions relating to the classification, labelling and packaging of substances and mixtures, suppliers shall ensure, before the placing on the market, that the following requirements are met:
  - (a) lamp oils, labelled with H304, intended for supply to the general public are visibly, legibly and indelibly marked as follows: "Keep lamps filled with this liquid out of the reach of children"; and, by 1 December 2010, "Just a sip of lamp oil or even sucking the wick of lamps may lead to life-threatening lung damage";
  - (b) grill lighter fluids, labelled with H304, intended for supply to the general public are legibly and indelibly marked by 1 December 2010 as follows: 'Just a sip of grill lighter fluid may lead to life threatening lung damage'; (c) lamps oils and grill lighters, labelled with H304, intended for supply to the general public are packaged in black opaque containers not exceeding 1 litre by 1 December 2010.';
- 1. Shall not be placed on the market in mixtures for use for tattooing purposes, and mixtures containing any such substances shall not be used for tattooing purposes, after 4 January 2022 if the substance or substances in question is or are present in the following circumstances:
  - (a) in the case of a substance classified in Part 3 of Annex VI to Regulation (EC) No 1272/2008 as carcinogen category 1A, 1B or 2, or germ cell mutagen category 1A, 1B or 2, the substance is present in the mixture in a concentration equal to or greater than 0,00005 % by weight;
  - (b) in the case of a substance classified in Part 3 of Annex VI to Regulation (EC) No 1272/2008 as reproductive toxicant category 1A, 1B or 2, the substance is present in the mixture in a concentration equal to or greater than 0,001 % by weight;
  - (c) in the case of a substance classified in Part 3 of Annex VI to Regulation (EC) No 1272/2008 as skin sensitiser category 1, 1A or 1B, the substance is present in the mixture in a concentration equal to or greater than 0,001 % by weight;
  - (d) in the case of a substance classified in Part 3 of Annex VI to Regulation (EC) No 1272/2008 as skin corrosive category 1, 1A, 1B or 1C or skin irritant category 2, or as serious eye damage category 1 or eye irritant category 2, the substance is present in the mixture in a concentration equal to or greater than:
  - (i) 0,1 % by weight, if the substance is used solely as a pH regulator;
  - (ii) 0,01 % by weight, in all other cases;
  - (e) in the case of a substance listed in Annex II to Regulation (EC) No 1223/2009 (\*1), the substance is present in the mixture in a concentration equal to or greater than 0,00005 % by weight;
  - (f) in the case of a substance for which a condition of one or more of the following kinds is specified in column g (Product type, Body parts) of the table in Annex IV to Regulation (EC) No 1223/2009, the substance is present in the mixture in a concentration equal to or greater than 0,00005 % by weight:
  - (i) "Rinse-off products";
  - (ii) "Not to be used in products applied on mucous membranes";
  - (iii) "Not to be used in eye products";
  - (g) in the case of a substance for which a condition is specified in column h (Maximum concentration in ready for

Germany: en Page: 17 / 23

Version number: 1.0 First version: 28.07.2025

#### Legend

use preparation) or column i (Other) of the table in Annex IV to Regulation (EC) No 1223/2009, the substance is present in the mixture in a concentration, or in some other way, that does not accord with the condition specified in that column;

- (h) in the case of a substance listed in Appendix 13 to this Annex, the substance is present in the mixture in a concentration equal to or greater than the concentration limit specified for that substance in that Appendix.
- 2. For the purposes of this entry use of a mixture "for tattooing purposes" means injection or introduction of the mixture into a person's skin, mucous membrane or eyeball, by any process or procedure (including procedures commonly referred to as permanent make-up, cosmetic tattooing, micro-blading and micro-pigmentation), with the aim of making a mark or design on his or her body.
- 3. If a substance not listed in Appendix 13 falls within more than one of points (a) to (g) of paragraph 1, the strictest concentration limit laid down in the points in question shall apply to that substance. If a substance listed in Appendix 13 also falls within one or more of points (a) to (g) of paragraph 1, the concentration limit laid down in point (h) of paragraph 1 shall apply to that substance.
- 4. By way of derogation, paragraph 1 shall not apply to the following substances until 4 January 2023:
- (a) Pigment Blue 15:3 (CI 74160, EC No 205-685-1, CAS No 147-14-8);
- (b) Pigment Green 7 (CI 74260, EC No 215-524-7, CAS No 1328-53-6).
- 5. If Part 3 of Annex VI to Regulation (EC) No 1272/2008 is amended after 4 January 2021 to classify or re-classify a substance such that the substance then becomes caught by point (a), (b), (c) or (d) of paragraph 1 of this entry, or such that it then falls within a different one of those points from the one within which it fell previously, and the date of application of that new or revised classification is after the date referred to in paragraph 1 or, as the case may be, paragraph 4 of this entry, that amendment shall, for the purposes of applying this entry to that substance, be treated as taking effect on the date of application of that new or revised classification.
- 6. If Annex II or Annex IV to Regulation (EC) No 1223/2009 is amended after 4 January 2021 to list or change the listing of a substance such that the substance then becomes caught by point (e), (f) or (g) of paragraph 1 of this entry, or such that it then falls within a different one of those points from the one within which it fell previously, and the amendment takes effect after the date referred to in paragraph 1 or, as the case may be, paragraph 4 of this entry, that amendment shall, for the purposes of applying this entry to that substance, be treated as taking effect from the date falling 18 months after entry into force of the act by which that amendment was made.
- 7. Suppliers placing a mixture on the market for use for tattooing purposes shall ensure that, after 4 January 2022, the mixture is marked with the following information:
- (a) the statement "Mixture for use in tattoos or permanent make-up";
- (b) a reference number to uniquely identify the batch;
- (c) the list of ingredients in accordance with the nomenclature established in the glossary of common ingredient names pursuant to Article 33 of Regulation (EC) No 1223/2009, or in the absence of a common ingredient name, the IUPAC name. In the absence of a common ingredient name or IUPAC name, the CAS and EC number. Ingredients shall be listed in descending order by weight or volume of the ingredients at the time of formulation. "Ingredient" means any substance added during the process of formulation and present in the mixture for use for tattooing purposes. Impurities shall not be regarded as ingredients. If the name of a substance, used as ingredient within the meaning of this entry, is already required to be stated on the label in accordance with Regulation (EC) No 1272/2008, that ingredient does not need to be marked in accordance with this Regulation;
- (d) the additional statement "pH regulator" for substances falling under point (d)(i) of paragraph 1;
- (e) the statement "Contains nickel. Can cause allergic reactions." if the mixture contains nickel below the concentration limit specified in Appendix 13;
- (f) the statement "Contains chromium (VI). Can cause allergic reactions." if the mixture contains chromium (VI) below the concentration limit specified in Appendix 13;
- (g) safety instructions for use insofar as they are not already required to be stated on the label by Regulation (EC) No 1272/2008.

The information shall be clearly visible, easily legible and marked in a way that is indelible.

The information shall be written in the official language(s) of the Member State(s) where the mixture is placed on the market, unless the Member State(s) concerned provide(s) otherwise.

Where necessary because of the size of the package, the information listed in the first subparagraph, except for point (a), shall be included instead in the instructions for use.

Before using a mixture for tattooing purposes, the person using the mixture shall provide the person undergoing the procedure with the information marked on the package or included in the instructions for use pursuant to this paragraph.

8. Mixtures that do not contain the statement "Mixture for use in tattoos or permanent make-up" shall not be

Germany: en Page: 18 / 23

Version number: 1.0 First version: 28.07.2025

#### Legend

used for tattooing purposes.

9. This entry does not apply to substances that are gases at temperature of 20  $^{\circ}$ C and pressure of 101,3 kPa, or generate a vapour pressure of more than 300 kPa at temperature of 50  $^{\circ}$ C, with the exception of formaldehyde (CAS No 50-00-0, EC No 200-001-8).

10. This entry does not apply to the placing on the market of a mixture for use for tattooing purposes, or to the use of a mixture for tattooing purposes, when placed on the market exclusively as a medical device or an accessory to a medical device, within the meaning of Regulation (EU) 2017/745, or when used exclusively as a medical device or an accessory to a medical device, within the same meaning. Where the placing on the market or use may not be exclusively as a medical device or an accessory to a medical device, the requirements of Regulation (EU) 2017/745 and of this Regulation shall apply cumulatively.

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

None of the ingredients are listed.

#### **Seveso Directive**

Not assigned.

# Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)

None of the ingredients are listed.

#### Regulation on the marketing and use of explosives precursors

None of the ingredients are listed.

# **Regulation on drug precursors**

None of the ingredients are listed.

#### Regulation on substances that deplete the ozone layer (ODS)

None of the ingredients are listed.

#### Regulation concerning the export and import of hazardous chemicals (PIC)

None of the ingredients are listed.

#### Regulation on persistent organic pollutants (POP)

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 2

(water hazard class) - classification acc. to annex 1 (AwSV)

#### **Technical instructions on air quality control (Germany)**

Number	Group of substances	Class	Conc.	Mass flow	Mass con- centration	Nota- tion
5.2.5	organic substances	-	1 – < 5 wt%	0,5 <sup>kg</sup> / <sub>h</sub>	50 <sup>mg</sup> / <sub>m³</sub>	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 car-

Germany: en Page: 19 / 23

Version number: 1.0 First version: 28.07.2025

#### **Notation**

bon, shall not be exceeded (except organic particulate matter)

# Storage of hazardous substances in non-stationary containers (TRGS 510) (Germany)

Storage class (LGK) 12

(non-combustible liquids)

# Chemikalien-Verbotsverordnung (Chemicals Prohibition Ordinance) - ChemVerbotsV

none of the ingredients are listed

#### Other information

Observe employment restrictions for young people according to § 22 JArbSchG. Observe occupational restrictions for mothers acc. to §§ 11 and 12 MuSchG!

# 15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this mixture by the supplier.

# **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 relatif au transport international des marchandises dangereuses par route (Agreement con- cerning the International Carriage of Dangerous Goods by Road)		
AGW	Workplace exposure limit		
Aquatic Acute	Hazardous to the aquatic environment - acute hazard		
Aquatic Chron- ic	Hazardous to the aquatic environment - chronic hazard		
ATE	Acute Toxicity Estimate		
BCF	Bioconcentration factor		
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		
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 caus-		

Germany: en Page: 20 / 23

Version number: 1.0 First version: 28.07.2025

Abbr.	Descriptions of used abbreviations	
AUDIT.	ing 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)	
ED	Endocrine disruptor	
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	
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)	
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	
LD50	Lethal Dose 50 %: the LD50 corresponds to the dose of a tested substance causing 50 % lethality during a specified time interval	
LGK	Lagerklasse (storage class according to TRGS 510, Germany)	
LOEC	Lowest Observed Effect Concentration	
LOEL	Lowest Observed Effect Level	
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	
NOEC	No Observed Effect Concentration	
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 (Regula- tions concerning the International carriage of Dangerous goods by Rail)	
Skin Corr.	Corrosive to skin	
Skin Irrit.	Irritant to skin	

Germany: en Page: 21 / 23

Version number: 1.0 First version: 28.07.2025

Abbr.	Descriptions of used abbreviations		
Skin Sens.	Skin sensitisation		
STEL	Short-term exposure limit		
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, Version 2023/707/EU.

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.

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 section 2 and 3)

Code	Text			
H301	Toxic if swallowed.			
H302	Harmful if swallowed.			
H310	Fatal 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.			
H319	Causes serious eye irritation.			
H330	Fatal if inhaled.			
H400	Very toxic to aquatic life.			
H410	Very toxic to aquatic life with long lasting effects.			

Germany: en Page: 22 / 23

Version number: 1.0 First version: 28.07.2025

# Responsible for the safety data sheet

C.S.B. GmbH Telephone: +49 (0) 2151 - 652086 - 0
Dujardinstr. 5 Telefax: +49 (0) 2151 - 652086 - 9
47829 Krefeld e-Mail: info@csb-compliance.com
Germany Website: www.csb-compliance.com

#### **Disclaimer**

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

Germany: en Page: 23 / 23