

Revision date: 24.05.2023 Version: 0025

Replacement of version 0024 of 20.06.2022

# Knauf Aquapanel GmbH & Co. KG

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

1.1 Product identifier

Trade name AQUAPANEL® Exterior Silicon Synthetic Resin Plaster - white

Product number KAQ\_0401 Item code 49320

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

Appropriate use:

The product is used as a facade plaster/structural plaster.

Recommended restrictions on use:

Preclude from exposure and handling this product those persons suffering from an allergy and those persons susceptible to respiratory disease.

1.3 Details of the supplier of the safety data sheet

Knauf Aquapanel GmbH & Co. KG

Zur Helle 11 D-58638 Iserlohn

Telephone: +49-2374-50360 Fax: +49-2374-5036300

e-mail: aquapanel.info@knauf.com

e-mail-address of the competent person responsible for this Safety Data Sheet:

info@gefstoff.de

**Technical contact:** 

Knauf Aquapanel GmbH & Co. KG, Zur Helle 11, D-58638 Iserlohn Telephone: +49-2374-50360 Fax: +49-2374-5036300

1.4 Emergency telephone number

Giftnotruf der Charité - Universitätsmedizin Berlin, Campus Benjamin Franklin, Haus VIII (Wirtschaftsgebäude), UG

Hindenburgdamm 30, 12203 Berlin

Giftnotruf Berlin +49-30-30686 700 (Advice in German and English)

(24 hours, Monday - Sunday)

# **SECTION 2: Hazards identification**

#### 2.1 Classification of the substance or mixture

Aquatic Chronic 3; H412

The product contains sensitising substances in concentrations above one tenth of the specific concentration limit which leads to a classification of the mixture as skin sensitising.

The special labelling requirements of section 2.8 of Annex II of the Regulation must be applied.





Trade name: AQUAPANEL® Exterior Silicon Synthetic Resin Plaster - white Product number: KAQ\_0401

Company/Undertaking: Knauf Aquapanel GmbH & Co. KG, Zur Helle 11, D-58638 Iserlohn

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2.2 Label elements

Hazard pictogram(s): No pictogram is used

Signal word(s): No signal word is used

Product identifier: AQUAPANEL® Exterior Silicon Synthetic Resin Plaster - white

Hazard statements: H412 Harmful to aquatic life with long lasting effects.

Precautionary statements: P102 Keep out of reach of children.

P262 Do not get in eyes, on skin, or on clothing.

P273 Avoid release to the environment.

P501 Dispose of contents/container to an authorized waste disposal site.

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), 2-octyl-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

Special labelling in accordance with Article 58 (3)

of Regulation (EU) No 528/2012: Treated article according to Regulation (EU) No 528/2012 to ensure the

stability and shelf life.

Contains pyridine-2-thiol-1-oxide, sodium salt, pyrithione zinc terbutryn.

#### Remark:

- The precautionary statements P102 and P501 must only appear on the label of packaging supplied to the general public.

- According to Article 35 paragraph 2 of Regulation (EC) No 1272/2008 packaging supplied to the general public should not have either a shape or form to mislead consumers.

#### 2.3 Other hazards

Persistent or repeated contact with the skin may cause irritations.

Risk of skin defatting and skin desiccation in case of persistent or repeated contact with the skin.

Preclude from exposure and handling this product those persons suffering from an allergy and those persons susceptible to respiratory disease.

Ingestion of the product can cause disorders of the intestinal flora.

The product is classified as slightly hazardous to water.

The mixture does not contain any substances classified as PBT/vPvB in a concentration of 0.1% or more.

The mixture does not contain substances having endocrine disrupting properties in accordance with Article 57 (f) of the Regulation (EC) No 1907/2006, Regulation (EU) No 2017/2100 or Regulation (EU) No 2018/605 in a concentration of 0.1% or more.

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

# 3.2 Mixtures

REACH registration number:

The ingredients do not require registration according to Regulation (EC) No 1207/2006 [REACH] (exempted from registration or the annual tonnage does not require a registration).

#### Characterisation

This product is a mixture.

Substances presenting a health/environmental hazard within the meaning of Regulation (EC) No 1272/2008

				,
CAS No	EC No	Identification	% by weight	Classification
13463-67-7	236-675-5	titanium dioxide	≥1 - < 10	Carc. 2; H351 (inhalation)
		[in powder form containing		
		1% or more of particles with		
		aerodynamic diameter ≤ 10		
		μm		





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# (continued from 3.2 Mixtures)

CAS No	EC No	Identification	% by weight	Classification
2634-33-5	220-120-9	1,2-benzisothiazol-3(2 <i>H</i> )-one	$\geq 0.005 - < 0.05$	Acute Tox. 4; H302
				Skin Irrit. 2; H315
				Skin Sens. 1; H317
				Eye Dam. 1; H318
				Aquatic Acute 1; H400
				Aquatic Chronic 2; H411
				M-factor: $M = 1$
3811-73-2	223-296-5	pyridine-2-thiol-1-oxide,	< 0.04	Acute Tox. 4; H302
		sodium salt		Acute Tox. 3; H311
				Skin Irrit. 2; H315
				Skin Sens. 1; H317
				Eye Irrit. 2; H319
				Acute Tox. 3; H331
				STOT RE 1; H372
				(nervous system)
				Aquatic Acute 1; H400
				Aquatic Chronic 2; H411
				EUH070
				M-factor: $M = 100$
13463-41-7	236-671-3	pyrithione zin	< 0,02	Acute Tox. 3; H301
				Eye Dam. 1; H318
				Acute Tox. 2; H330
				Repr. 1B; H360D
				STOT RE 1; H372
				Aquatic Acute 1; H400
				Aquatic Chronic 1; H410
				M-factor: $M = 1000$
				M-factor (chronic): M = 10
886-50-0	212-950-5	terbutryn	< 0.01	Acute Tox. 4; H302
				Skin Sens. 1B; H317
				Aquatic Acute 1; H400
				Aquatic Chronic 1; H410
				M-factor: $M = 100$
				M-factor (chronic): M = 100
26530-20-1	247-761-7	2-octyl-2 <i>H</i> -isothiazol-3-one	≥ 0.00015 -	Acute Tox. 3; H301
			< 0.0015	Acute Tox. 3; H311
				Skin Corr. 1; H314
				Skin Sens. 1A; H317
				Eye Dam. 1; H318
				Acute Tox. 2; H330
				Aquatic Acute 1; H400
				Aquatic Chronic 1; H410
				EUH071
				M-factor: $M = 100$
				M-factor (chronic): M = 100
55965-84-9	not available	reaction mass of 5-chloro-2-	≥ 0.00015 -	Acute Tox. 3; H301
		methyl-2 <i>H</i> -isothiazol-3-one	< 0.0015	Acute Tox. 2; H310
		and 2-methyl-2 <i>H</i> -isothiazol-		Skin Corr. 1C; H314
		3-one (3:1)		Skin Sens. 1A; H317
				Eye Dam. 1; H318
				Acute Tox. 2; H330
				Aquatic Acute 1; H400
				Aquatic Chronic 1; H410
				EUH071
				M-factor: $M = 100$
				M-factor (chronic): M = 100

See subsection 2.2 for further details. Full text of the hazard statements see Section 16.

Substances for which there are Union workplace exposure limits (see also Section 8.) No substances.





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#### (continued from 3.2 Mixtures)

#### **Additional information**

Titanium dioxide: In accordance with note 10 of Annex VI of Regulation (EC) No 1272/2008 the classification as carcinogen by inhalation applies only to mixtures in powder form.

Specific concentration limits for 1,2-benzisothiazol-3(2H)-one in accordance with Annex VI of Regulation (EC) No 1272/2008:

Skin Sens. 1; H317:  $C \ge 0.05\%$ 

ATE for pyridine-2-thiol-1-oxide, sodium salt in accordance with Regulation (EU) 2022/692:

inhalation: ATE = 0.5 mg/L (dusts or mists)

dermal: ATE = 790 mg/kg bworal: ATE = 500 mg/kg bw

Specific concentration limits for 2-octyl-2H-isothiazol-3-one in accordance with Annex VI of Regulation (EC)

No 1272/2008:

Skin Sens. 1A; H317:  $C \ge 0.0015\%$ 

ATE for 2-octyl-2H-isothiazol-3-one in accordance with Annex VI of Regulation (EC) No. 1272/2008:

inhalation: ATE = 0.27 mg/L (dusts or mists)

dermal: ATE = 311 mg/kg bworal: ATE = 125 mg/kg bw

Specific concentration limits for reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-

isothiazol-3-one (3:1) in accordance with Annex VI of Regulation (EC) No 1272/2008:

Eye Dam. 1; H318:  $C \ge 0.6\%$ 

Eye Irrit. 2; H319:  $C \ge 0.06 - < 0.6\%$ 

Skin Corr. 1C; H314:  $C \ge 0.6\%$ 

Skin Irrit. 2; H315:  $C \ge 0.06 - < 0.6\%$ Skin Sens. 1A; H317:  $C \ge 0.0015\%$ 

# **SECTION 4: First aid measures**

# 4.1 Description of first aid measures

#### **General information**

Take off contaminated clothing immediately and wash before reuse.

Emergency eyewash should be provided in the immediate working surroundings.

## In case of inhalation

Take affected person to fresh air. By continuous complaints seek medical advice.

#### In case of contact with skin

In case of contact with skin wash off immediately with soap and water. Do not wash with solvents or diluting agent. By continuous complaints seek medical advice.

## In case of contact with eyes

In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. Remove contact lenses, if present and easy to do.

#### In case of ingestion

If swallowed, rinse mouth with water (only if the person is conscious).

Do not induce vomiting. Put victim at rest. Summon a doctor immediately.

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

Risk of skin defatting and skin desiccation in case of persistent or repeated contact with the skin.

Possible allergic reaction in case of skin contact.

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

Treat symptomatically. No information available.





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# **SECTION 5: Firefighting measures**

## 5.1 Extinguishing media

Telephone:

## Suitable extinguishing media

Alcohol-resistant foam, carbon dioxide, dry powder, water spray jet...

## Unsuitable extinguishing media

Full water jet.

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

In the event of fire the following can be released: toxic pyrolysis products (e.g. carbon dioxide, carbon monoxide).

# 5.3 Advice for firefighters

Wear self-contained breathing apparatus. Do not inhale explosion and/or combustion gases.

Cool endangered containers with water spray jet.

Collect contaminated firefighting water separately, must not be discharged into the drains.

Aqueous product is not conbustible as long as the water fraction is present.

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

# 6.1 Personal precautions, protective equipment and emergency procedures

#### For non-emergency personnel

Ensure adequate ventilation. Use personal protective clothing. Keep away from unprotected people.

## For emergency responders

For suitable fabric for personal protective clothing see Section 8.

## 6.2 Environmental precautions

Do not discharge into the drains, the aquatic environment and soil.

# 6.3 Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, kieselguhr, acid binder, universal binder).

Send in suitable containers for recovery or disposal.

Clean contaminated floors and objects thoroughly with detergents, do not use solvents.

#### 6.4 Reference to other sections

For personal protective equipment see also Section 8. For disposal considerations see also Section 13.

# **SECTION 7: Handling and storage**

# 7.1 Precautions for safe handling

# Advice on safe handling

Provide good ventilation of working area (local exhaust ventilation if necessary).

Comply with the minimum standards in accordance with TRGS 5001

Moreover, comply with the protective measures in accordance with TRGS 4011.

In designing the work process the model solutions of the Control Guidance Sheet 120<sup>1</sup> must be taken into consideration in case of small-area skin contact (e.g. splashes) regardless on the duration of skin contact. In designing the work process the model solutions of the Control Guidance Sheet 120<sup>1</sup> must be taken into consideration in case of large-area skin contact (wetting of the skin) and short-term effect (duration of skin contact ess than 15 minutes per shift).

In designing the work process the model solutions of the Control Guidance Sheets 120<sup>1</sup> and 250<sup>1</sup> must be taken into consideration in case of large-area skin contact (wetting of the skin) and long-term effect (duration of skin contact more than 15 minutes per shift.

#### Advice on general occupational hygiene

Avoid contact with eyes and skin. Take off contaminated clothing immediately and wash before reuse.

At work do not eat, drink, smoke or take drugs.

Clean skin thoroughly after work and before breaks; apply skin cream.

Use barrier skin cream. Set out skin protection guidelines.

Emergency eyewash should be provided in the immediate working surroundings.





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## 7.2 Conditions for safe storage, including any incompatibilities

## Advice on protection against fire and explosion

No special measures necessary.

Aqueous product is not combustible as long as the water fraction is present.

## Requirements for storage rooms and vessels

Keep container tightly closed.

Keep only in the original container in a dry, well ventilated place.

#### Advice on storage compatibility

Do not store together with strong acidic and alkaline materials and oxidising agents.

The information about joint storage given in Table 12 of TRGS 510<sup>1</sup> must be observed.

## Further information on storage conditions

Protect from heat and direct sunlight. Protect from frost.

Recommended storage temperature: +5°C up to +25°C.

Storage life: 24 months in the unopened original container.

#### Storage class (for Germany only)

LGK 12 in accordance with TRGS 5101.

## 7.3 Specific end use(s)

The product is only intended for the uses mentioned under subsection 1.2.

For outdoor use.

Observe technical data sheet.

In accordance with GISBAU (Information system of the German employers' liability insurance association for building and construction industry):

GISCODE<sup>4</sup>: BSW50 (covering agents, water based, solvent-containing, protective film)

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

8.1 Control parameters

CAS number	Identification	Limit values	Remarks
13463-67-7	titanium dioxide		National limit values – eight hours
		10 mg/m³	Belgium
		6 mg/m³ total dust	Denmark
		11 mg/m³ inhalable aerosol	France
		10 mg/m³ inhalable dust	Germany
		1.25 mg/m³ respirable dust	Germany
		10 mg/m³ inhalable fraction	Ireland
		4 mg/m³ respirable fraction	Ireland
		10 mg/m <sup>3</sup>	Latvia
		5 mg/m <sup>3</sup>	Norway
		10 mg/m³ inhalable fraction	Poland
		10 mg/m <sup>3</sup>	Romania
		5 mg/m <sup>3</sup>	Slovakia
		10 mg/m <sup>3</sup> inhalable fraction	Spain
		5 mg/m³ inhalable aerosol	Sweden
		3 mg/m³ respirable aerosol	Switzerland
		10 mg/m³ inhalable aerosol	United Kingdom
		4 mg/m³ respirable aerosol	United Kingdom
			National limit values – short term
		12 mg/m³ total dust	Denmark
		20 mg/m³ inhalable dust	Germany
		2.5 mg/m³ respirable dust	Germany
		15 mg/m³	Romania



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# (continued from 8.1 Control parameters)

CAS number	Identification	Limit values	Remarks
26530-20-1	2-octyl-2 <i>H</i> -isothiazol-		National limit values – eight hours
	3-one	0.05 mg/m³ inhalable aerosol	Austria
		0.05 mg/m³ inhalable fraction	Germany
		0.05 mg/m³ inhalable fraction	Switzerland
		$0.05 \text{ mg/m}^3$	The Netherlands
			National limit values – short term
		0.05 mg/m³ inhalable aerosol	Austria
		0.1 mg/m³ inhalable fraction	Germany
		0.1 mg/m³ inhalable fraction	Switzerland
3811-73-2	pyridine-2-thiol-1-		National limit values – eight hours
	oxide, sodium salt	1 mg/m³	Austria
		1 mg/m³	Denmark
		0.2 mg/m³ inhalable fraction	Germany
		0.2 mg/m³ inhalable fraction	Switzerland
		1 mg/m <sup>3</sup>	The Netherlands
			National limit values – short term
		4 mg/m <sup>3</sup>	Austria
		0.4 mg/m³ inhalable fraction	Germany
		0.4 mg/m³ inhalable fraction	Switzerland
55965-84-9	reaction mass of 5-		National limit values – eight hours
	chloro-2-methyl-2 <i>H</i> -	$0.05 \text{ mg/m}^3$	Austria
	isothiazol-3-one and 2-	0.2 mg/m³ inhalable fraction*	Germany
	methyl-2 <i>H</i> -isothiazol-	0.2 mg/m³ inhalable fraction	Switzerland
	3-one (3:1)		National limit values – short term
		0.4 mg/m³ inhalable fraction*	Germany
		0.4 mg/m³ inhalable fraction	Switzerland

<sup>\*</sup> Germany: This data is recommended by scientific experience and is not established law.

#### DNEL values

# Additional limit values for titanium dioxide in accordance with the registration dossier:

 $\begin{array}{ll} worker, long-term\ exposition:\ inhalation,\ local\ effect: \\ general\ population,\ long-term\ exposition:\ inhalation,\ local\ effect: \\ \end{array} \qquad \begin{array}{ll} 1.25\ mg/m^3 \\ 210\ \mu g/m^3 \end{array}$ 

# Additional limit values for 1,2-benzisothiazol-3(2H)-one in accordance with the registration dossier:

worker, long-term exposition: inhalation, systemic effect:

worker, long-term exposition: dermal, systemic effect:

general population, long-term exposition: inhalation, systemic effect:

general population, long-term exposition: dermal, systemic effect:

general population, long-term exposition: dermal, systemic effect:

0.345 mg/kg<sub>bw</sub>/d

# Additional limit values for reaction mass of 5-chloro-2-methyl-2*H*-isothiazol-3-one and 2-methyl-2*H*-

# isothiazol-3-one (3:1) in accordance with the registration dossier:

worker, long-term exposition: inhalation, local effect:

worker, short-term exposition: inhalation, local effect:

general population, long-term exposition: inhalation, local effect:

general population, short-term exposition: inhalation, local effect:

general population, short-term exposition: inhalation, local effect:

general population, long-term exposition: oral, systemic effect:

general population, short-term exposition: oral, systemic effect:

0.09 mg/kg<sub>bw</sub>/d

general population, short-term exposition: oral, systemic effect:

0.11 mg/kg<sub>bw</sub>/d

## Additional limit values for pyrithione zinc in accordance with the registration dossier:

worker, long-term exposition: dermal, systemic effect: 0.01 mg/kg<sub>bw</sub>/d

#### PNEC values

## Ergänzende Werte für 1,2-Benzisothiazolin-3-on gemäß Registrierungsdossier:

aquatisch, Süßv	vasser:			4,03 µg/l
aquatisch, zeitv	veilige (intermittierende) Freisetz	zung:		1,1 μg/l
aquatisch, Mee	rwasser:			0,403 µg/l
aquatisch, zeitv	veilige (intermittierende) Freisetz	zung:		110 ng/l
aquatisch, Klär	anlage:			1,03 mg/l
Sediment, Süßv	vasser:			49,9 µg/kg <sub>dw</sub>
Sediment, Mee	rwasser:			4,99 µg/kg <sub>dw</sub>
terrestrisch, Ero	dreich:			3 mg/kg <sub>dw</sub>





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#### (continued from 8.1 Control parameters)

# Additional limit values for 2-octyl-2H-isothiazol-3-one in accordance with the registration dossier:

aquatic, fresh water:	2.2 μg/l
aquatic, fresh water, intermittent release:	1.22 µg/l
aquatic, marine water:	0.22 µg/l
aquatic, marine water, intermittent release:	0.122 μg/l
sediment, fresh water:	47.5 μg/kg <sub>dw</sub>
sediment, marine water:	$4.75  \mu g/kg_{dw}$
soil environment:	$8.2  \mu g/kg_{dw}$

# Additional limit values for reaction mass of 5-chloro-2-methyl-2*H*-isothiazol-3-one and 2-methyl-2*H*-isothiazol-3-one (3:1) in accordance with the registration dossier:

aquatic, fresh water:  $3.39 \mu g/l$ aquatic, fresh water, intermittent release:  $3.39 \mu g/l$ aquatic, marine water:  $3.39 \mu g/l$  $3.39 \mu g/l$ aquatic, marine water, intermittent release: 0.23 mg/l aquatic, sewage treatment plant: sediment, fresh water: 0.027 mg/kgdw 0.027 mg/kgdw sediment, marine water: soil environment: 0.01 mg/kg<sub>dw</sub>

The methods for measuring chemical agents in workplace atmosphere must meet the general requirements of EN 481, EN 482 and EN 689.

#### 8.2 Exposure controls

#### Appropriate engineering controls

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.

See also subsection 7.1.

## Individual protection measures, such as personal protective equipment

Personal protective equipment needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled.

In the cases of special applications, it is recommended to check the chemical resistance with the manufacturer/ supplier of the personal protective equipment.

# Eye/face protection



Tightly fitting safety glasses in accordance with EN 166. In case of spraying: goggles.

# **Hand protection**



Protective gloves made of nitrile rubber.

Wear cotton undermitten if possible.

The protective gloves to be used must be comply with the specifications of the standard EN 374.

## **Body protection**

Closed work clothing. In case of spraying: single-use suit.

# **Respiratory protection**



In case of spraying, higher concentrations and if ventilation insufficient, use a respiratory protection apparatus with respiration filter (particle filter P2).

The limitations in wearing time according to the DGUV Regel 112-190<sup>2</sup> (rule of the German employers' liability insurance association) for the use of respirators have to observed.





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## (continued from 8.2 Exposure controls)

#### Thermal hazards

Not relevant.

#### **Environmental exposure controls**

Consumer exposure controls:

Other protection measures such as segregation of activity, minimisation of personnel, respiratory protection, impervious suits and face shields should also be considered for high dispersion activities which are likely to lead to substantial aerosol or vapour release, e.g. spraying.

# **SECTION 9: Physical and chemical properties**

## 9.1 Information on basic physical and chemical properties

Physical state: pasty
Colour: various
Odour: characteristic
Odour threshold: no data available

Melting point/freezing point (°C): 0 Boiling point/initial boiling point/boiling range (°C): 100

Flammability: not flammable
Lower explosion limit: not applicable
Upper explosion limit: not applicable
Flash point (°C), closed cup: not applicable
Auto-ignition temperature (°C): not applicable
Decomposition temperature (°C): not determined

pH (as supplied): 9 (DIN ISO 976)

Kinematic viscosity (mm²/s):

Solubility in water:

Soluble in:

Partition coefficient: n-octanol/water (log value):

Vapour pressure (20°C) (hPa):

no data available
completely miscible
no data available
no data available

Density (kg/l): approx. 1.80 (DIN EN ISO 2811-1)

Relative vapour density (20°C): not determined Particle characteristics: not applicable

## 9.2 Other information

Content of VOC: < 1.9% (35 g/l maximum)

# **SECTION 10: Stability and reactivity**

## 10.1 Reactivity

No data available for the product.

#### 10.2 Chemical stability

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

## 10.3 Possibility of hazardous reactions

Possible reaction in case of contact with strong acids, strong alkalies and oxidising agents.

#### 10.4 Conditions to avoid

When used as intended, no particular conditions known.

# 10.5 Incompatible materials

Avoid contact with strong acids, strong alkalies and oxidising agents.

## 10.6 Hazardous decomposition products

No hazardous decomposition products known.

For hazardous combustion products see subsection 5.2.





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# **SECTION 11: Toxicological information**

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

The product has not been tested.

Acute toxicity				
LD50 rat, oral	(mg/kg)	> 2000	(titanium dioxide)	(OECD Test Guideline 401)
		490	(1,2-benzisothiazol-3(2H)-one)	(OECD Test Guideline 401)
		500	(pyridine-2-thiol-1-oxide, sodium salt	
		2045	(terbutryn)	(RTECS)
		125	(2-octyl-2 <i>H</i> -isothiazol-3-one)	(ATE)
		66	(reaction mass of 5-chloro-2-methyl-2	
			2-methyl-2 <i>H</i> -isothiazol-3-one (3:1))	(OECD Test Guideline 401)
		269	(pyrithione zinc)	(OECD Test Guideline 401)
LC50 rat, inhalation	(mg/l/4h)	3.43	(titanium dioxide)	(OECD Test Guideline 403)
		0.5	(pyridine-2-thiol-1-oxide, sodium salt	(ATE; dusts or mists)
		> 8	(terbutryn)	(RTECS)
		0.27	(2-octyl-2 <i>H</i> -isothiazol-3-one)	(ATE; dusts or mists)
		0.171	(reaction mass of 5-chloro-2-methyl-2	2 <i>H</i> -isothiazol-3-one and
			2-methyl-2 <i>H</i> -isothiazol-3-one (3:1))	(OECD Test Guideline 403)
		1.03	(pyrithione zinc)	(OECD Test Guideline 403)
LD50 rat, dermal	(mg/kg)	> 2000	(1,2-benzisothiazol-3(2H)-one)	(OECD Test Guideline 402)
		790	(pyridine-2-thiol-1-oxide, sodium salt	(ATE)
		> 2000	(terbutryn)	(RTECS)
		311	(2-octyl-2 <i>H</i> -isothiazol-3-one)	(ATE)
		> 2000	(pyrithione zinc)	(EPA OPP 81-2)
LD50 rabbit, dermal	(mg/kg)	660	(reaction mass of 5-chloro-2-methyl-2	2 <i>H</i> -isothiazol-3-one and
			2-methyl-2 <i>H</i> -isothiazol-3-one (3:1))	(registration dossier)
Skin corrosion/irritati	on			
Skin irritation, rabbit	Not irritat	ing	(titanium dioxide)	(OECD Test Guideline 404)
, , , , , , , , , , , , , , , , , , , ,	Irritating	8	(pyridine-2-thiol-1-oxide, sodium salt	
	Corrosive		(2-octyl-2 <i>H</i> -isothiazol-3-one)	(OECD Test Guideline 404)
	Corrosive		(reaction mass of 5-chloro-2-methyl-2	
			2-methyl-2 <i>H</i> -isothiazol-3-one (3:1))	(OECD Test Guideline 404)
	Not irritat	ing	(pyrithione zinc)	(OECD Test Guideline 404)
		8	(+)	(
Serious eye damage/ir				(0.5.05.5
Eye irritation, rabbit	Not irritat	_	(titanium dioxide)	(OECD Test Guideline 405)
	Not irritat		(pyridine-2-thiol-1-oxide, sodium salt	
	Eye Dama	ige Cat. I	(2-octyl-2 <i>H</i> -isothiazol-3-one)	(OECD Test Guideline 405)
	Corrosive		(reaction mass of 5-chloro-2-methyl-2	
	E D	G . 1	2-methyl-2 <i>H</i> -isothiazol-3-one (3:1))	(OECD Test Guideline 405)
	Eye Dama	ige Cat. I	(pyrithione zinc)	(OECD Test Guideline 405)

# Respiratory or skin sensitisation

The product has not been tested.

The product contains 1,2-benzisothiazol-3(2*H*)-one, 2-octyl-2*H*-isothiazol-3-one, reaction mass of 5-chloro-2-methyl-2*H*-isothiazol-3-one and 2-methyl-2*H*-isothiazol-3-one (3:1) and pyridine-2-thiol-1-oxide, sodium salt. These substances are classified as sensitising.

# Germ cell mutagenicity

The mixture does not contain substances classified as germ cell mutagens.

## Carcinogenicity

The mixture contains a substance classified as Carc. 2 according to Regulation (EC) No 1272/2008 below the generic cut-off value.

Titanium dioxide: In accordance with note 10 of Annex VI of Regulation (EC) No 1272/2008 the classification as carcinogen by inhalation applies only to mixtures in powder form.

## Reproductive toxicity

The mixture contains a substance classified as toxic for the reproduction below the cut-off value.





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Telephone:	+49-(0)2374-50360	Revision date:	24.05.2023

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

## Specific target organ toxicity (STOT)-single exposure

The mixture does not contain substances classified as being a specific target organ toxicant after single exposure.

## Specific target organ toxicity (STOT)-repeated exposure

The mixture contains substances classified as being a specific target organ toxicant after repeated exposure below the cut-off value.

# **Aspiration hazard**

The mixture does not contain aspiration toxicants.

#### Symptoms related to the physical, chemical and toxicological characteristics

Persistent or repeated contact with the skin may cause irritations.

Risk of skin defatting and skin desiccation in case of persistent or repeated contact with the skin.

Possible allergic reaction in case of skin contact.

Ingestion of the product can cause disorders of the intestinal flora.

## Delayed and immediate effects as well as chronic effects from short and long-term exposure

Persistent or repeated contact with the skin may cause irritations.

Risk of skin defatting and skin desiccation in case of persistent or repeated contact with the skin. Persons suffering from an allergy may be sensitive to very low concentrations of allergenic substances and should consequently have no further contact with this product (possibility of an allergic reaction). Ingestion of the product can cause disorders of the intestinal flora.

#### 11.2 Information on other hazards

The mixture has not been tested.

## **Endocrine disrupting properties**

The mixture does not contain substances having endocrine disrupting properties in accordance with Article 57 (f) of the Regulation (EC) No 1907/2006, Regulation (EU) No 2017/2100 or Regulation (EU) No 2018/605 in a concentration of 0.1% or more.

#### Other information

None.

# **SECTION 12: Ecological information**

#### 12.1 Toxicity

Aquatic toxi	city:			
96 h LC50	(fish)	2.18 mg/l	(Oncorhynchus mykiss; rainbow trout)	
			(1,2-benzisothiazol-3(2H)-one)	(OECD Test Guideline 203)
		7,3 µg/l	(Oncorhynchus mykiss; rainbow trout)	
			(pyridine-2-thiol-1-oxide, sodium salt)	(EPA OPP 72-1)
		1.1 mg/l	(Lepomis macrochirus; bluegill sunfish	)
			(terbutryn)	(external safety data sheet)
		0.05 mg/l	(Oncorhynchus mykiss; rainbow trout)	
			(2-octyl-2 <i>H</i> -isothiazol-3-one)	(external safety data sheet)
		0.19 mg/l	(Oncorhynchus mykiss; rainbow trout)	
			(reaction mass of 5-chloro-2-methyl-2F	<i>H</i> -isothiazol-3-one and
			2-methyl-2 <i>H</i> -isothiazol-3-one (3:1))	(EPA OPP 72-1)
		2.6 μg/l	(Pimephales promelas; fathead minnow	v)
			(pyrithione zinc)	(EPA OPP 72-1)
21 d NOEC	(fish)	0.01 mg/l	(Oncorhynchus mykiss; rainbow trout)	
			(terbutryn)	(external safety data sheet)
28 d NOEC	(fish)	1.22 µg/l	(Pimephales promelas; fathead minnow	v)
			(pyrithione zinc)	(OECD Test Guideline 210)
35 d NOEC	(fish)	$\geq$ 46.4 µg/l	(Danio rerio; zebrafish)	
			(reaction mass of 5-chloro-2-methyl-2 <i>H</i>	<i>H</i> -isothiazol-3-one and
			2-methyl-2 <i>H</i> -isothiazol-3-one (3:1))	(OECD Test Guideline 210)





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# (continued from 12.1 Aquatic toxicity)

48 h EC50	(daphnia)	> 100 mg/l	(Daphnia magna)	
io ii Eeso	(сарина)	7 100 mg/1	(titanium dioxide)	(OECD Test Guideline 202)
		2.94 mg/l	(Daphnia magna)	(======================================
			(1,2-benzisothiazol-3(2H)-one)	(OECD Test Guideline 202)
		2.66 mg/l	(Daphnia magna)	(
		J	(terbutryn)	(external safety data sheet)
		0.42 mg/l	(Daphnia magna)	•
		C	(2-octyl-2 <i>H</i> -isothiazol-3-one)	(external safety data sheet)
		0.16 mg/l	(Daphnia magna)	•
		C	(reaction mass of 5-chloro-2-methyl-2 <i>H</i> -isothiazol-3-one and	
			2-methyl-2 <i>H</i> -isothiazol-3-one (3:1))	(EPA OPP 72-2)
		8.2 µg/l	(Daphnia magna)	
			(pyrithione zinc)	(EPA OPP 72-2)
48 h LC50	(daphnia)	22 μg/l	(Daphnia magna)	
			(pyridine-2-thiol-1-oxide, sodium salt)	(EPA OPP 72-2))
21 d NOEC	(daphnia)	$\geq 10 \text{ mg/l}$	(Daphnia magna)	
			(titanium dioxide)	(OECD Test Guideline 202)
		1.3 mg/l	(Daphnia magna)	
			(terbutryn)	(external safety data sheet)
		0.058  mg/l	(Daphnia magna)	
			(2-octyl-2 <i>H</i> -isothiazol-3-one)	(external safety data sheet)
		0.004 mg/l	(Daphnia magna)	
			(reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and	
			2-methyl-2 <i>H</i> -isothiazol-3-one (3:1))	(EPA OPP 72-4)
72 h EC50	(algae)	> 100 mg/l	(Raphidocelis subcapitata)	
			(titanium dioxide)	(OECD Test Guideline 201)
		0.0403 mg/l	(Pseudokirchneriella subcapitata)	
			(1,2-benzisothiazol-3(2 <i>H</i> )-one)	(OECD Test Guideline 201)
		6.3 µg/l	(Skeletonema costatum)	
			(reaction mass of 5-chloro-2-methyl-2H	
72.1 E 050	(1)	0.46 //	2-methyl-2 <i>H</i> -isothiazol-3-one (3:1))	(OECD Test Guideline 201)
72 h ErC50	(algae)	0.46 mg/l	(Raphidocelis subcapitata)	(OECD T
		110~/1	(pyridine-2-thiol-1-oxide, sodium salt)	(OECD Test Guideline 201)
		110 µg/l	(Raphidocelis subcapitata)	(OECD Test Cycleline 201)
			(pyrithione zinc)	(OECD Test Guideline 201)

## Behaviour in sewage works:

The behaviour of the product in sewage treatment plants has not been tested. Do not discharge into the drains.

## 12.2 Persistence and degradability

The product has not been tested.

1,2-benzisothiazol-3(2H)-one:
 Pyridine-2-thiol-1-oxide, sodium salt:
 73%/28d (OECD Test Guideline 301 C). Readily biodegradable.
 73%/28d (OECD Test Guideline 301 B). Readily biodegradable.

- 2-octyl-2*H*-isothiazol-3-one: Not readily biodegradable.

- Reaction mass of 5-chloro-2-methyl-2*H*-isothiazol-3-one and 2-methyl-2*H*-isothiazol-3-one (3:1):

55.8%/28d (OECD Test Guideline 301 B). Not readily biodegradable.

- Pyrithione zinc: 39%/28d (OECD Test Guideline 301 B). Not readily biodegradable.

Chemical oxygen demand (COD)

Biochemical oxygen demand (BOD5)

AOX-hint

Not relevant.

Not relevant.

Not to apply.

# 12.3 Bioaccumulative potential

The product has not been tested. Partition coefficient n-octanol/water:

Tartition coefficient it octanos, water.							
	0.7	(20°C; pH 7)	(1,2-benzisothiazol-3(2 <i>H</i> )-one)	(EU method A.8)			
	0.002	(20°C; pH 8.5 - < 8.6)	(pyridine-2-thiol-1-oxide, sodium salt)	(EU method A.8)			
	3.65 - 3.74		(terbutryn)	(external safety data sheet)			
	2.61	(25°C)	(2-octyl-2 <i>H</i> -isothiazol-3-one)	(REACh registration dossier)			
	0.326	(24°C)	(reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-				
			2 <i>H</i> -isothiazol-3-one (3:1))	(OECD Test Guideline 107)			
	0.9	(25°C; pH 7.5 - < 7.7)	(pyrithione zinc)	(OECD Test Guideline 107)			





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#### 12.4 Mobility in soil

The product has not been tested.

#### 12.5 Results of PBT and vPvB assessment

The mixture does not contain any substances classified as PBT/vPvB in a concentration of 0.1% or more.

## 12.6 Endocrine disrupting properties

The mixture does not contain substances having endocrine disrupting properties in accordance with Article 57 (f) of the Regulation (EC) No 1907/2006, Regulation (EU) No 2017/2100 or Regulation (EU) No 2018/605 in a concentration of 0.1% or more.

#### 12.7 Other adverse effects

Ozone depletion potential No data available. Photochemical ozone creation potential No data available. Global warming potential No data available. The product is classified as slightly hazardous to water.

Contains according to the formulation following compounds of directives 2006/11/EC and 80/68/EEC:

List II: biocides and their derivatives not appearing in List I.

# **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

Waste disposal according to official state regulations.

Consult the local waste disposal expert about waste disposal.

Sewage disposal must be avoided.

#### Disposal operations/recovery operations according to Directive 2008/98/EC

Disposal operations: D 9 Physico-chemical treatment

Recovery operations: R 5 Recycling/reclamation of other inorganic materials

#### Properties of waste which render it hazardous in accordance with Annex III of Directive 2008/98/EC

Not relevant.

#### Product/unused product

Waste disposal corresponding to European Waste Catalogue. Wastes must be classified with respect to their origin and depending on different processing steps. The waste codes mentioned as follows are only constituted as our recommendations. Referring to the particular case they should be completed or revised.

# **Dried-out product remainders:**

EC waste code: 08 01 12

Waste notation: Waste paint and varnish other than those mentioned in 08 01 11

Liquid product residues:

EC waste code: 08 01 20

Waste notation: Aqueous suspensions containing paint or varnish other than those

mentioned in 08 01 19

Alternative:

EC waste code: 17 09 04

Waste notation: Mixed construction and demolition wastes other than those mentioned

in 17 09 01, 17 09 02 and 17 09 03  $\,$ 

Contaminated packaging

Recommendation: Contaminated packaging should be emptied as far as possible and after

appropriate cleansing may be taken for reuse.

Recommended cleansing agent: Water.

Packaging that cannot be cleaned:

EC waste code: 15 01 02

Waste notation: Plastic packaging





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# **SECTION 14: Transport information**

#### 14.1 UN number or ID number

No dangerous good in accordance with the UN Model Regulations (ADR/RID/ADN/IMDG/ICAO/IATA).

# 14.2 UN proper shipping name

Not relevant.

# 14.3 Transport hazard class(es)

Not relevant.

# 14.4 Packing group

Not relevant.

#### 14.5 Environmental hazards

Not relevant.

## 14.6 Special precautions for user

Not relevant.

## 14.7 Maritime transport in bulk according to IMO instruments

Not relevant.

# **SECTION 15: Regulatory information**

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

# Information regarding relevant Union safety, health and environmental provisions

- Conditions of restriction in accordance

with Annex XVII Regulation (EC) No 1907/2006:

The mixture does not contain substances classified as substances of very high concern (SVHC) in accordance

with Article 57 of the Regulation (EC) No 1907/2006 in a concentration of 0.1% or more.

- Directive 2004/42/EC: The product is not subject to Directive 2004/42/EC.

## Information regarding national laws/national measures that may be relevant (for Germany only)

Indications on restriction of occupation:

Major Accident Ordinance:

Not relevant
Fire and explosion hazards:

Regulation on clean air (TA Luft):

Not relevant
Not relevant

Water hazard class: WGK 1 – slightly hazardous to water

(deduction of the WGK according to Annex 1

No  $5.2 \text{ AwSV})^3$ 

The German Ordinance on facilities for handling substances that are hazardous to water (AwSV) has

to be observed.

German Ordinance on Hazardous Substances

(in accordance with EC-Directive 98/24/EC): Articles 6, 7, 8 and 14 must be observed. Technical Rules for Hazardous Substances<sup>1</sup>: TRGS 400, 401, 500, 510, 555, 900

Rules of the employers' liability insurance association<sup>2</sup>: DGUV Regel 112-189, 112-190, 112-192, 112-195

DGUV Regel 100-500, chapter 2.29 (processing of coating material)

Classification in accordance with the easy-to-use workplace control scheme for hazardous substances of the Federal

Institute for Occupational Safety and Health, version 2.2, 2014<sup>5</sup>:skin contact: hazard group HA

## 15.2 Chemical safety assessment

No chemical safety assessment has been carried out for the mixture.





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#### **SECTION 16: Other information**

**Keeping (restrictions)** Article 8 paragraphs 5 and 6 of the German Ordinance on Hazardous Substances has to be

observed. (only for Germany)

**Supply** to professional user, industrial user, to the general public

Full text of the hazard statements referred to under sections 2 and 3 of the Safety Data Sheet

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.
H319 Causes serious eye irritation.

H330 Fatal if inhaled. H331 Toxic if inhaled.

H351 Suspected of causing cancer. H360D May damage the unborn child. H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.
 H411 Toxic to aquatic life with long lasting effects.
 H412 Harmful to aquatic life with long lasting effects.

EUH070 Toxic by eye contact.

EUH071 Corrosive to the respiratory tract.

EUH208 Contains 1,2-benzisothiazol-3(2H)-one, reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and

2-methyl-2*H*-isothiazol-3-one (3:1), 2-octyl-2*H*-isothiazol-3-one. May produce an allergic reaction.

EUH211 Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or

mist.

## Key or legend to abbreviations and acronyms used in the safety data sheet

ADN: Accord européen relatif au transport international des marchandises dangereuses par voie de

navigation intérieure

ADR: Accord relatif au transport international des marchandises dangereuses par route

AOX: adsorbable organically bound halogens

ATE: Acute Toxicity Estimate

AwSV: Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen (Ordinance on

facilities for handling substances that are hazardous to water)

bw body weight

DNEL: Derived No-Effect Level

EPA: United States Environmental Protection Agency

ICAO/IATA: International Civil Aviation Organisation/International Air Transport Association-Dangerous

Goods Regulations

IMDG-Code: International Maritime Dangerous Goods-Code

IMO: International Maritime Organization

LGK: Lagerklasse (storage class)

NOEC: No Observed Effect Level Concentration

OECD: Organisation for Economic Co-operation and Development

OPP: Office of Pesticide Programs
PBT: persistent, bioaccumulative and toxic
PNEC: Predicted No-Effect Concentration

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer

RTECS: Registry of Toxic Effects of Chemical Substances

TRGS: Technische Regeln für Gefahrstoffe (Technical Rules for Hazardous Substances)
VCI: Verband der chemischen Industrie (German Association of Chemical Industry)

vPvB: very persistent and very bioaccumulative

#### Literature references and sources for data

<sup>1</sup> https://www.baua.de

<sup>2</sup> https://www.arbeitssicherheit.de

<sup>3</sup> https://www.umweltbundesamt.de

<sup>4</sup> https://www.wingisonline.de

<sup>5</sup> https://www.baua.de/emkg



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#### Method used for the classification of the mixture

The classification was undertaken in accordance with the classification criteria of Annex I of Regulation (EC) No 1272/2008.

## Changes which have been made to the previous version of the safety data sheet

Revised sections: 2.2, 3.2, 8.1, 8.2, 11.1, 12.1, 12.2, 12.3, 15.1, 16

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

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