

Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) 2020/878



Article No.: 35-1-100
Print date: 09.02.2026
Version: 1.68

Aqua Metallschutz 3 in 1
Revision date: 28.08.2025
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SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Article No. (manufacturer/supplier): 35-1-100
Trade name/designation: Aqua Metallschutz 3 in 1
weiß
seidenglänzend
UFI: 8CCN-TJXP-YG0M-WCYX

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

Relevant identified uses

Varnish / paint

Uses advised against

Aware of any other information

1.3. Details of the supplier of the safety data sheet

Supplier (manufacturer/importer/only representative/downstream user/distributor)

P.A. Jansen GmbH u. Co., KG
Hochstadenstraße 22
D-53474 Bad Neuenahr-Ahrweiler
Telephone: +49 2641 3897-0
Homepage: www.jansen.de

Department responsible for information:

laboratory
E-mail (competent person): sicherheitsdatenblatt@jansen.de

1.4. Emergency telephone number

Emergency telephone number: +49 2641 3897-51
Only available during office hours.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

Skin Sens. 1 / H317	Respiratory or skin sensitisation	May cause an allergic skin reaction.
Aquatic Chronic 2 / H411	Hazardous to the aquatic environment	Toxic to aquatic life with long lasting effects.

2.2. Label elements

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

Hazard pictograms



Warning

Hazard statements

H317 May cause an allergic skin reaction.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P280 Wear protective gloves and eye protection/face protection.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard components for labelling

2-Methylisothiazol-3(2H)-one
reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and
2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)
1,2-Benzisothiazol-3(2H)-one

Supplemental hazard information

No data available

2.3. Other hazards

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No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Description Water-dilutable metal protective paint

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

EC No. CAS No. Index No.	REACH No. Designation classification: // Remark	weight-%
231-944-3 7779-90-0 030-011-00-6	01-2119485044-40 Trizinc bis(orthophosphate) Aquatic Acute 1 H400 (M = 1) / Aquatic Chronic 1 H410 (M = 1)	3 - 5
203-961-6 112-34-5 603-096-00-8	01-2119475104-44 2-(2-butoxyethoxy)ethanol Eye Irrit. 2 H319	1,5 - 2
201-074-9 77-99-6	01-2119486799-10 Propylidynetrimethanol Repr. 2 H361fd	0,1 - 0,15
215-222-5 1314-13-2 030-013-00-7	01-2119463881-32 zinc oxide Aquatic Acute 1 H400 (M = 1) / Aquatic Chronic 1 H410 (M = 1)	0,1 - 0,15
220-120-9 2634-33-5 613-088-00-6	01-2120761540-60 1,2-Benzisothiazol-3(2H)-one Acute Tox. 2 H330 / Acute Tox. 4 H302 / Skin Irrit. 2 H315 / Eye Dam. 1 H318 / Skin Sens. 1A H317 / Aquatic Acute 1 H400 (M = 1) / Aquatic Chronic 1 H410 (M = 1) Specific concentration limit (SCL): Skin Sens. 1A H317 >= 0,036 Acute toxicity estimate (ATE): ATE (oral): 450 mg/kg bw / ATE (inhalation, dust/mist): 0,21 mg/L	0,0036 - 0,036
220-239-6 2682-20-4 613-326-00-9	01-2120764690-50 2-Methylisothiazol-3(2H)-one 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 (M = 10) / Aquatic Chronic 1 H410 (M = 1) / EUH071 Specific concentration limit (SCL): Skin Sens. 1A H317 >= 0,0015 / Acute Tox. 4 H332 >= 3 / Skin Irrit. 2 H315 >= 5 / Eye Irrit. 2 H319 >= 5 / Skin Corr. 1B H314 >= 10 / Acute Tox. 3 H331 >= 25 / Acute Tox. 4 H302 >= 25 / Aquatic Acute 1 H400 >= 25	0,0036 - 0,036
55965-84-9 613-167-00-5	01-2120764691-48 reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1) Acute Tox. 2 H330 / Acute Tox. 2 H310 / Acute Tox. 3 H301 / Skin Corr. 1C H314 / Eye Dam. 1 H318 / Skin Sens. 1A H317 / Aquatic Acute 1 H400 (M = 100) / Aquatic Chronic 1 H410 (M = 100) / EUH071 Specific concentration limit (SCL): Skin Corr. 1C H314 >= 0,6 / Skin Irrit. 2 H315 >= 0,06 / Eye Dam. 1 H318 >= 0,6 / Eye Irrit. 2 H319 >= 0,06 / Skin Sens. 1A H317 >= 0,0015 Acute toxicity estimate (ATE): ATE (oral): 49 mg/kg bw / ATE (dermal): 92 mg/kg bw / ATE (inhalation, dust/mist): 0,33 mg/L / ATE (inhalation, dust/mist): 0,17 mg/L	0,00015 - 0,0015

Additional information

Full text of classification: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness give nothing by mouth, place in recovery position and seek medical advice.

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In case of inhalation

Remove casualty to fresh air and keep warm and at rest. In case of irregular breathing or respiratory arrest provide artificial respiration.

Following skin contact

Take off immediately all contaminated clothing. After contact with skin, wash immediately with plenty of water and soap. Do not use solvents or thinners.

After eye contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical advice immediately.

Following ingestion

If swallowed, rinse mouth with water (only if the person is conscious). Seek medical advice immediately. Keep victim calm. Do NOT induce vomiting.

4.2. **Most important symptoms and effects, both acute and delayed**

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

4.3. **Indication of any immediate medical attention and special treatment needed**

First Aid, decontamination, treatment of symptoms.

SECTION 5: Firefighting measures

5.1. **Extinguishing media**

Suitable extinguishing media

alcohol resistant foam, carbon dioxide, Powder, spray mist, (water)

Unsuitable extinguishing media

strong water jet

5.2. **Special hazards arising from the substance or mixture**

Dense black smoke occurs during fire. Inhaling hazardous decomposing products can cause serious health damage.

5.3. **Advice for firefighters**

Provide a conveniently located respiratory protective device.

SECTION 6: Accidental release measures

6.1. **Personal precautions, protective equipment and emergency procedures**

Keep away from sources of ignition. Ventilate affected area. Do not breathe vapours.

6.2. **Environmental precautions**

Do not allow to enter into surface water or drains. If the product contaminates lakes, rivers or sewages, inform competent authorities in accordance with local regulations.

6.3. **Methods and material for containment and cleaning up**

Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth) and collect it for disposal in appropriate containers in accordance with the local regulations (see section 13). Clean using cleansing agents. Do not use solvents.

6.4. **Reference to other sections**

Observe protective provisions (see section 7 and 8).

SECTION 7: Handling and storage

7.1. **Precautions for safe handling**

Advices on safe handling

Avoid contact with skin, eyes and clothes. Do not inhale dusts, particulates and spray mist when using this preparation. Avoid respiration of swarf. When using do not eat, drink or smoke. Personal protection equipment: refer to section 8. Do not empty containers with pressure - no pressure vessel! Always keep in containers that correspond to the material of the original container. Follow the legal protection and safety regulations.

Further information

No special measures are required.

7.2. **Conditions for safe storage, including any incompatibilities**

Requirements for storage rooms and vessels

Storage in accordance with the Ordinance on Industrial Safety and Health (BetrSIVO). Keep container tightly closed. Do not empty containers with pressure - no pressure vessel! Smoking is forbidden. Access only for authorised persons. Store

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carefully closed containers upright to prevent any leaks.

Hints on joint storage

Keep away from strongly acidic and alkaline materials as well as oxidizers.

Further information on storage conditions

Take care of instructions on label. Store in a well-ventilated and dry room at temperatures between 8 °C and 30 °C. Protect from heat and direct sunlight.

7.3. Specific end use(s)

Observe technical data sheet. Observe instructions for use.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limit values

2-(2-butoxyethoxy)ethanol

Index No. 603-096-00-8 / EC No. 203-961-6 / CAS No. 112-34-5

WEL, TWA: 67,5 mg/m³; 10 ppm

WEL, STEL: 101,2 mg/m³; 15 ppm

Additional information

TWA : Long-term occupational exposure limit value

STEL : short-term occupational exposure limit value

Ceiling : peak limitation

DNEL:

Propane-1,2-diol

EC No. 200-338-0 / CAS No. 57-55-6

DNEL long-term inhalative (local), Workers: 10 mg/m³

DNEL long-term inhalative (systemic), Workers: 168 mg/m³

DNEL long-term oral (repeated), Consumer: 85 mg/kg

DNEL long-term dermal (systemic), Consumer: 213 mg/kg

DNEL long-term inhalative (local), Consumer: 10 mg/m³

DNEL long-term inhalative (systemic), Consumer: 50 mg/m³

2-(2-butoxyethoxy)ethanol

Index No. 603-096-00-8 / EC No. 203-961-6 / CAS No. 112-34-5

DNEL long-term dermal (systemic), Workers: 20 mg/kg

DNEL acute inhalative (local), Workers: 101,2 mg/m³

DNEL long-term inhalative (local), Workers: 67,5 mg/m³

DNEL long-term inhalative (systemic), Workers: 67,5 mg/m³

DNEL long-term oral (repeated), Consumer: 1,25 mg/kg

DNEL long-term dermal (systemic), Consumer: 10 mg/kg

DNEL acute inhalative (local), Consumer: 50,6 mg/m³

DNEL long-term inhalative (local), Consumer: 34 mg/m³

DNEL long-term inhalative (systemic), Consumer: 34 mg/m³

reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)

Index No. 613-167-00-5 / CAS No. 55965-84-9

DNEL long-term inhalative (local), Workers: 0,02 mg/m³

DNEL acute inhalative (local), Workers: 0,04 mg/m³

DNEL short-term oral (acute), Consumer: 0,11 mg/kg

DNEL long-term oral (repeated), Consumer: 0,09 mg/kg

DNEL acute inhalative (local), Consumer: 0,04 mg/m³

DNEL acute inhalative (systemic), Consumer: 0,02 mg/m³

zinc oxide

Index No. 030-013-00-7 / EC No. 215-222-5 / CAS No. 1314-13-2

DNEL long-term dermal (systemic), Workers: 83 mg/kg

DNEL long-term inhalative (local), Workers: 0,5 mg/m³

DNEL long-term inhalative (systemic), Workers: 5 mg/m³

DNEL long-term oral (repeated), Consumer: 0,83 mg/kg

DNEL long-term dermal (systemic), Consumer: 83 mg/kg

DNEL long-term inhalative (systemic), Consumer: 2,5 mg/m³

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Trizinc bis(orthophosphate)

Index No. 030-011-00-6 / EC No. 231-944-3 / CAS No. 7779-90-0

DNEL long-term dermal (systemic), Workers: 83 mg/kg

DNEL long-term inhalative (systemic), Workers: 5 mg/m³

DNEL long-term oral (repeated), Consumer: 0,83 mg/kg

DNEL long-term dermal (systemic), Consumer: 83 mg/kg

DNEL long-term inhalative (systemic), Consumer: 2,5 mg/m³

2-Methylisothiazol-3(2H)-one

Index No. 613-326-00-9 / EC No. 220-239-6 / CAS No. 2682-20-4

DNEL acute inhalative (local), Workers: 0,043 mg/m³

DNEL long-term inhalative (local), Workers: 0,021 mg/m³

DNEL long-term oral (repeated), Consumer: 0,027 mg/kg

DNEL acute inhalative (local), Consumer: 0,043 mg/m³

DNEL long-term inhalative (local), Consumer: 0,021 mg/m³

DNEL short-term oral (acute), Consumer: 0,053 mg/kg

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

Index No. 613-088-00-6 / EC No. 220-120-9 / CAS No. 2634-33-5

DNEL long-term dermal (systemic), Workers: 0,966 mg/kg

DNEL long-term inhalative (systemic), Workers: 6,81 mg/m³

DNEL long-term dermal (systemic), Consumer: 0,345 mg/kg

DNEL long-term inhalative (systemic), Consumer: 1,2 mg/m³

titanium dioxide [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]

Index No. 022-006-00-2 / EC No. 236-675-5 / CAS No. 13463-67-7

DNEL long-term inhalative (local), Workers: 10 mg/m³

DNEL long-term oral (repeated), Consumer: 700 mg/kg

Propylidynetrimechanol

EC No. 201-074-9 / CAS No. 77-99-6

DNEL long-term dermal (systemic), Workers: 0,94 mg/kg

DNEL long-term inhalative (systemic), Workers: 3,3 mg/m³

DNEL long-term oral (repeated), Consumer: 0,34 mg/kg

DNEL long-term dermal (systemic), Consumer: 0,34 mg/kg

DNEL long-term inhalative (systemic), Consumer: 0,58 mg/m³

PNEC:

Propane-1,2-diol

EC No. 200-338-0 / CAS No. 57-55-6

PNEC aquatic, freshwater: 260 mg/L

PNEC aquatic, marine water: 26 mg/L

PNEC aquatic, intermittent release: 183 mg/L

PNEC sediment, freshwater: 572 mg/kg

PNEC sediment, marine water: 57,2 mg/kg

PNEC, soil: 50 mg/kg

PNEC sewage treatment plant (STP): 2000 mg/L

PNEC Secondary Poisoning: 1133 mg/kg

2-(2-butoxyethoxy)ethanol

Index No. 603-096-00-8 / EC No. 203-961-6 / CAS No. 112-34-5

PNEC aquatic, freshwater: 1 mg/L

PNEC aquatic, marine water: 0,1 mg/L

PNEC aquatic, intermittent release: 3,9 mg/L

PNEC sediment, freshwater: 4,4 mg/kg

PNEC sediment, marine water: 0,44 mg/kg

PNEC, soil: 0,32 mg/kg

PNEC sewage treatment plant (STP): 200 mg/L

PNEC Secondary Poisoning: 56 mg/kg

reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)

Index No. 613-167-00-5 / CAS No. 55965-84-9

PNEC aquatic, freshwater: 0,0033 mg/L

PNEC aquatic, marine water: 0,0033 mg/L

PNEC sediment, freshwater: 0,027 mg/kg

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PNEC sediment, marine water: 0,027 mg/kg
PNEC, soil: 0,01 mg/kg
PNEC sewage treatment plant (STP): 0,23 mg/L

zinc oxide

Index No. 030-013-00-7 / EC No. 215-222-5 / CAS No. 1314-13-2

PNEC aquatic, freshwater: 0,0206 mg/L
PNEC aquatic, marine water: 0,0061 mg/L
PNEC sediment, freshwater: 117,8 mg/kg
PNEC sediment, marine water: 56,5 mg/kg
PNEC, soil: 35,6 mg/kg
PNEC sewage treatment plant (STP): 0,1 mg/L

Trizinc bis(orthophosphate)

Index No. 030-011-00-6 / EC No. 231-944-3 / CAS No. 7779-90-0

PNEC aquatic, freshwater: 20,6 µg/L
PNEC aquatic, marine water: 6,1 µg/L
PNEC sediment, freshwater: 117,8 mg/kg
PNEC sediment, marine water: 56,5 mg/kg
PNEC, soil: 35,6 mg/kg
PNEC sewage treatment plant (STP): 100 µg/L

2-Methylisothiazol-3(2H)-one

Index No. 613-326-00-9 / EC No. 220-239-6 / CAS No. 2682-20-4

PNEC aquatic, freshwater: 0,0033 mg/L
PNEC aquatic, marine water: 0,0033 mg/L
PNEC aquatic, intermittent release: 0,0033 mg/L
PNEC, soil: 0,0471 mg/kg
PNEC sewage treatment plant (STP): 0,23 mg/L

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

Index No. 613-088-00-6 / EC No. 220-120-9 / CAS No. 2634-33-5

PNEC aquatic, freshwater: 0,004 mg/L
PNEC aquatic, marine water: 0,0004 mg/L
PNEC aquatic, intermittent release: 0,0011 mg/L
PNEC sediment, freshwater: 0,0499 mg/kg
PNEC sediment, marine water: 0,0049 mg/kg
PNEC, soil: 3 mg/kg
PNEC sewage treatment plant (STP): 1,03 mg/L

titanium dioxide [in powder form containing 1 % or more of particles with aerodynamic diameter $\leq 10 \mu\text{m}$]

Index No. 022-006-00-2 / EC No. 236-675-5 / CAS No. 13463-67-7

PNEC aquatic, freshwater: 0,184 mg/L
PNEC aquatic, marine water: 0,0184 mg/L
PNEC aquatic, intermittent release: 0,193 mg/L
PNEC sediment, freshwater: 1000 mg/kg
PNEC sediment, marine water: 100 mg/kg
PNEC, soil: 100 mg/kg
PNEC sewage treatment plant (STP): 100 mg/L

8.2. Exposure controls

Provide good ventilation. This can be achieved with local or room suction. If this should not be sufficient to keep aerosol and solvent vapour concentration below the exposure limit values, a suitable respiratory protection must be used.

Personal protection equipment

Respiratory protection

If concentration of solvents is beyond the occupational exposure limit values, approved and suitable respiratory protection must be used. Use only respiratory protection equipment with CE-symbol including four digit test number. Observe the wear time limits as specified by the manufacturer. Recommended respiratory protection articles: Inadequately ventilated workplaces and spraying procedures are necessary. Fresh air mask or short-time work combination filter A2-P2 are recommended.

Hand protection

For prolonged or repeated handling the following glove material must be used: NBR (Nitrile rubber)

Thickness of the glove material > 0,4 mm ; Breakthrough time: > 480 min.

Observe the instructions and details for use, storage, maintenance and replacement provided by the protective glove manufacturer. Penetration time of glove material depending on intensity and duration of exposure to skin.

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Eye/face protection

Wear closely fitting protective glasses in case of splashes.

Body protection

No special measures are necessary.

Protective measures

After contact clean skin thoroughly with water and soap or use appropriate cleanser.

Environmental exposure controls

Do not allow to enter into surface water or drains. See section 7. No additional measures necessary.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	white
Odour:	characteristic
Odour threshold:	No data available
Melting point/freezing point:	-68 °C Source: 2-(2-butoxyethoxy)ethanol
Initial boiling point and boiling range:	100 °C Source: Water
Flammability:	No data available
Lower and upper explosion limit:	
Lower explosion limit:	0,8 Vol-% Method: literature value
Upper explosion limit:	No data available
Flash point:	No data available
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
pH at 20 °C:	7 - 8 / 100,0 weight-%
Kinematic viscosity (40°C):	> 20,5 mm²/s
Viscosity at °C:	55 Poise
Solubility(ies):	
Water solubility at 20 °C:	partially soluble
Partition coefficient: n-octanol/water:	see section 12
Vapour pressure at 20 °C:	0,2 mbar Source: Propane-1,2-diol
Density and/or relative density:	
Density at 20 °C:	1,34 g/cm³ Method: DIN 53217
Relative vapour density:	No data available
particle characteristics:	not applicable

9.2. Other information

Solid content:	57 weight-%
solvent content:	
Organic solvents:	6 weight-%
Water:	37 weight-%

SECTION 10: Stability and reactivity

10.1. Reactivity

No information available.

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10.2. Chemical stability

Stable when applying the recommended regulations for storage and handling. Further information on correct storage: refer to section 7.

10.3. Possibility of hazardous reactions

Keep away from strong acids, strong bases and strong oxidizing agents to avoid exothermic reactions.

10.4. Conditions to avoid

Stable when applying the recommended regulations for storage and handling. Further information on correct storage: refer to section 7. Hazardous decomposition byproducts may form with exposure to high temperatures.

10.5. Incompatible materials

not applicable

10.6. Hazardous decomposition products

Hazardous decomposition byproducts may form with exposure to high temperatures, e.g.: carbon dioxide, carbon monoxide, smoke, nitrogen oxides.

SECTION 11: Toxicological information

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

Acute toxicity

Propane-1,2-diol

oral, LD50, Rat: 22000 mg/kg

dermal, LD50, Rabbit: > 2000 mg/kg

inhalative (dust and mist), LC50, Rabbit: 317042 mg/L (2 h)

2-(2-butoxyethoxy)ethanol

oral, LD50, Rat: > 2000 mg/kg 2410 - 3305 mg/kg

dermal, LD50, Rabbit: 2764 mg/kg

Method: OECD 402

inhalative (dust and mist), LC50, Rat: > 29 mg/L (2 h)

Method: OECD 403

reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)

oral, LD50, Rat: 49,6 mg/kg 49,6 - 75 mg/kg

Method: OECD 401

dermal, LD50, Rabbit: 92,4 mg/kg

inhalative (vapours), LC50, Rat: 0,33 mg/L (4 h)

inhalative (dust and mist), LC50, Rat: 0,171 mg/L (4 h)

zinc oxide

oral, LD50, Rat: > 15000 mg/kg

Trizinc bis(orthophosphate)

oral, LD50, Rat: > 5000 mg/kg

inhalative (dust and mist), LC50, Rat: > 5,7 mg/L (4 h)

2-Methylisothiazol-3(2H)-one

oral, LD50, Rat 232 - 249 mg/kg

dermal, LD50, Rabbit: 200 mg/kg

inhalative (dust and mist), LC50, Rat: 0,11 mg/L (4 h)

Method: OECD 403

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

oral, LD50, Rat 670 - 784 mg/kg

Method: OECD 401

dermal, LD50, Rat: > 2000 mg/kg

titanium dioxide [in powder form containing 1 % or more of particles with aerodynamic diameter $\leq 10 \mu\text{m}$]

oral, LD50, Rat: > 5000 mg/kg

Method: OECD 425

dermal, LD50, Rabbit: > 2000 mg/kg

inhalative (dust and mist), LC50, Rat 3,43 - 5,09 mg/L (4 h)

Method: OECD 403

Propylidynetrimethanol

oral, LD50, Rat: ≥ 14700 mg/kg

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dermal, LD50, Rat: > 500 mg/kg
dermal, LD50, Rabbit: > 10000 mg/kg
inhalative (dust and mist), LC50, Rat: > 0,29 mg/L (4 h)

Skin corrosion/irritation; Serious eye damage/eye irritation

2-(2-butoxyethoxy)ethanol
eyes
irritant.

reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)

Skin, Rabbit (4 h)
Corrosive
eyes, Rabbit
Risk of serious damage to eyes.

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

Skin, Rabbit
Method: OECD 404
mild irritant.
eyes, Rabbit
Method: OECD 405
strongly irritant.

Respiratory or skin sensitisation

May cause an allergic skin reaction.

reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)

Skin, Guinea pig: ; Evaluation sensitising
Method: OECD 406

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

Skin, Guinea pig:
Method: OECD 406
Skin sensitisation

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

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

STOT-single exposure; STOT-repeated exposure

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

Aspiration hazard

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

Practical experience/human evidence

Inhaling of solvent components above the MWC-value can lead to health damage, e.g. irritation of the mucous membrane and respiratory organs, as well as damage to the liver, kidneys and the central nerve system. Indications for this are: headache, dizziness, fatigue, amyosthenia, drowsiness, in serious cases: unconsciousness. Solvents may cause some of the aforementioned effects through skin resorption. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and/or absorption through skin. Splashing may cause eye irritation and reversible damage.

Overall assessment on CMR properties

The ingredients in this mixture do not meet the criteria for classification as CMR category 1A or 1B according to CLP.

11.2. Information on other hazards

Endocrine disrupting properties

No information available.

SECTION 12: Ecological information

Classification according to Regulation (EC) No 1272/2008 [CLP]
There is no information available on the preparation itself .
Do not allow to enter into surface water or drains.

12.1. Toxicity

Propane-1,2-diol

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Fish toxicity, LC50, Oncorhynchus mykiss (Rainbow trout): 40613 mg/L (96 h)

Method: OECD 203

Daphnia toxicity, EC50, Mysidopsis bahia: 18340 mg/L (48 h)

Method: OECD 202

Algae toxicity, ErC50, Pseudokirchneriella subcapitata: 19000 mg/L (96 h)

Method: OECD 201

Bacteria toxicity, NOEC, Pseudomonas putida: > 20000 mg/L (18 h)

2-(2-butoxyethoxy)ethanol

Fish toxicity, LC50, Lepomis macrochirus (Bluegill): 1300 mg/L (96 h)

Method: OECD 203

Daphnia toxicity, EC50: > 100 mg/L (48 h)

Bacteria toxicity, EC50: 255 mg/L

Algae toxicity, EC50, Scenedesmus subspicatus: > 100 mg/L (96 h)

Method: OECD 201

reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)

Fish toxicity, LC50, Oncorhynchus mykiss (Rainbow trout): 0,22 mg/L (96 h)

Method: OECD 203

Daphnia toxicity, EC50, Daphnia magna (Big water flea): 0,1 mg/L (48 h)

Method: OECD 202

Algae toxicity, EC50, Pseudokirchneriella subcapitata: 0,018 mg/L (72 h)

Method: OECD 201

Bacteria toxicity, EC50, Activated sludge: 7,92 (3 h)

Method: OECD 209

Daphnia toxicity, NOEC, Daphnia magna: 0,004 mg/L (28 d)

zinc oxide

Fish toxicity, LC50, Oncorhynchus mykiss (Rainbow trout): 0,169 mg/L (96 h)

Daphnia toxicity, EC50: 0,413 mg/L (48 h)

Algae toxicity, ErC50, Selenastrum capricornutum: 0,136 mg/L

Trizinc bis(orthophosphate)

Daphnia toxicity, EC50: 2,44 mg/L (48 h)

Algae toxicity, ErC50, Selenastrum capricornutum: 0,8 mg/L (72 h)

2-Methylisothiazol-3(2H)-one

Fish toxicity, LC50, Oncorhynchus mykiss (Rainbow trout): 6 mg/L (96 h)

Daphnia toxicity, EC50, Daphnia pulex (water flea): 1,6 mg/L (48 h)

Algae toxicity, ErC50, Pseudokirchneriella subcapitata: 0,157 mg/L (72 h)

Bacteria toxicity, EC50, Activated sludge: 34,6 mg/L (3 h)

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

Fish toxicity, LC50, Oncorhynchus mykiss (Rainbow trout): 1,6 mg/L (96 h)

Method: OECD 203

Daphnia toxicity, EC50, Daphnia magna: 3,27 mg/L (48 h)

Method: OECD 202

Algae toxicity, EC50, Selenastrum capricornutum: 0,11 mg/L (72 h)

Method: OECD 201

Bacteria toxicity, EC20, Activated sludge: 3,3 mg/L (3 h)

Method: OECD 209

titanium dioxide [in powder form containing 1 % or more of particles with aerodynamic diameter $\leq 10 \mu\text{m}$]

Fish toxicity, LC50, Oncorhynchus mykiss (Rainbow trout): > 100 mg/L (96 h)

Daphnia toxicity, LC50, Daphnia magna: > 100 mg/L (48 h)

Algae toxicity, EC50, Pseudokirchneriella subcapitata: 16 mg/L (72 h)

Propylidynetrimethanol

Fish toxicity, LC50, Brachydanio rerio (zebra-fish): > 100 mg/L (96 h)

Daphnia toxicity, EC50, Daphnia magna (Big water flea): 13000 mg/L (48 h)

Algae toxicity, ErC50, Selenastrum capricornutum: > 1000 mg/L (72 h)

Method: OECD 201

Long-term Ecotoxicity

Toxic to aquatic life with long lasting effects.

Propane-1,2-diol

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Daphnia toxicity, NOEC, Ceriodaphnia spec: 13020 mg/L (7 d)
reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)
Fish toxicity, NOEC, Oncorhynchus mykiss (Rainbow trout): 0,098 mg/L (28 d)
Method: OECD 210
Daphnia toxicity, NOEC, Daphnia magna: 0,004 mg/L (21 d)
Method: OECD 211
Algae toxicity, NOEC, Pseudokirchneriella subcapitata: 0,0012 mg/L (72 h)
Fish toxicity, NOEC, Oncorhynchus mykiss (Rainbow trout): 0,098 mg/L (28 d)
Method: OECD 210
zinc oxide
Bacteria toxicity, NOEC, Activated sludge: 0,1 mg/L (4 h)
2-Methylisothiazol-3(2H)-one
Fish toxicity, NOEC, Pimephales promelas (fathead minnow): 2,1 mg/L (33 d)
Method: OECD 210
Daphnia toxicity, NOEC, Daphnia magna (Big water flea): 0,044 mg/L (21 d)
Method: OECD 211
1,2-Benzisothiazol-3(2H)-one
Fish toxicity, NOEC, Oncorhynchus mykiss (Rainbow trout): 0,21 mg/L (28 d)
Method: OECD 215
Daphnia toxicity, NOEC, Daphnia magna (Big water flea): 1,2 mg/L (21 d)
Method: OECD 211
Algae toxicity, NOEC, Selenastrum capricornutum: 0,04 mg/L (72 h)
Method: OECD 201
Propylidynetrimethanol
Daphnia toxicity, NOEC, Daphnia magna (Big water flea): > 1000 mg/L (21 d)

12.2. Persistence and degradability

Propane-1,2-diol
Biodegradation: 81 % (28 d); Evaluation Readily biodegradable (according to OECD criteria)
Method: OECD 301F
2-(2-butoxyethoxy)ethanol
Biodegradation: > 70 % (28 d); Evaluation Readily biodegradable (according to OECD criteria)
Method: OECD 301E
reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)
Biodegradation: < 50 % (10 d)
Method: OECD 301B
Not readily biodegradable (according to OECD criteria)
2-Methylisothiazol-3(2H)-one
Biodegradation: 50 % (29 d)
Method: OECD 301B
Not readily biodegradable (according to OECD criteria)
1,2-Benzisothiazol-3(2H)-one
Biodegradation: 85 % (63 d)
Method: OECD 301C
Moderately/partially biodegradable.
Propylidynetrimethanol
Biodegradation: 100 % (28 d)
Method: OECD 302B
Readily biodegradable (according to OECD criteria)

12.3. Bioaccumulative potential

Propane-1,2-diol
Partition coefficient n-octanol /water (log P O/W):: -1,07
2-(2-butoxyethoxy)ethanol
Partition coefficient n-octanol /water (log P O/W):: 1
Method: OECD 117
reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no.

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220-239-6] (3:1)

Partition coefficient: n-octanol/water: -0,71 - -0,75

Method: OECD 107

2-Methylisothiazol-3(2H)-one

Partition coefficient: n-octanol/water: <= 0,32

Method: OECD 117

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

Partition coefficient n-octanol /water (log P O/W):: 0,7

Method: OECD 117

Propylidynetrimethanol

Partition coefficient n-octanol /water (log P O/W):: -0,47

Bioconcentration factor (BCF)

Propane-1,2-diol

Bioconcentration factor (BCF): 0,09

reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)

Bioconcentration factor (BCF): 3,6

Method: OECD 107

Does not accumulate in organisms.

2-Methylisothiazol-3(2H)-one

Bioconcentration factor (BCF): 3,16

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

Bioconcentration factor (BCF): 6,95

Method: OECD 305

titanium dioxide [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]

Bioconcentration factor (BCF), Oncorhynchus mykiss (Rainbow trout): 19 - 352

Propylidynetrimethanol

Bioconcentration factor (BCF), Cyprinus carpio (Common Carp): < 17

12.4. Mobility in soil

Toxicological data are not available.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6. Endocrine disrupting properties

No information available.

12.7. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Appropriate disposal / Product

Recommendation

Do not allow to enter into surface water or drains. This material and its container must be disposed of in a safe way. Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste. Dispose of waste according to applicable legislation.

List of proposed waste codes/waste designations in accordance with EWC

080111* Waste paint and varnish containing organic solvents or other dangerous substances

*Hazardous waste according to Directive 2008/98/EC (waste framework directive).

Appropriate disposal / Package

Recommendation

Non-contaminated packages may be recycled. Vessels not properly emptied are special waste.

SECTION 14: Transport information

14.1. UN number or ID number

UN 3082

14.2. UN proper shipping name

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Land transport (ADR/RID):	Environmentally hazardous substance, liquid, n.o.s. (Trizinkbis(orthophosphat))
Sea transport (IMDG):	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Trizinkbis(orthophosphat))
Air transport (ICAO-TI / IATA-DGR):	Environmentally hazardous substance, liquid, n.o.s. (Trizinkbis(orthophosphat))
14.3. Transport hazard class(es)	9
14.4. Packing group	III
14.5. Environmental hazards	
Land transport (ADR/RID)	UMWELTGEFÄHRDEND
Marine pollutant	p / Trizinkbis(orthophosphat)
14.6. Special precautions for user	
Transport always in closed, upright and safe containers. Make sure that persons transporting the product know what to do in case of an accident or leakage.	
Advices on safe handling: see parts 6 - 8	
Further information	
Land transport (ADR/RID)	
Tunnel restriction code	-
in packages <= 5 litres	Kein Gut der Klasse 9 Sondervorschr. 375
Sea transport (IMDG)	
EmS-No.	F-A, S-F
in packages <= 5 litres	not restricted 2.10.7
Air transport (ICAO-TI / IATA-DGR)	
in packages <= 5 litres	Not restricted
14.7. Maritime transport in bulk according to IMO instruments	
No transport as bulk according IBC - Code.	

SECTION 15: Regulatory information

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

EU legislation

Regulation (EU) No. 528/2012 on biocides

Treated goods

The mixture contains biocidal active ingredients.

bronopol (INN)

reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)

2-Methylisothiazol-3(2H)-one

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

Sodium benzoate

Use

Main group 2: Preservatives

Product-type 6: Preservatives for products during storage

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances [Seveso-III-Directive]

Category: E2 Hazardous to the aquatic environment in Category Chronic 2

Quantity 1: 200 t / Quantity 2: 500 t

Directive 2004/42/EC on the limitation of emissions of volatile organic compounds

VOC product category: (Cat. A/i) ; VOC limit value: 140 g/l

Maximum VOC content of the product in a ready to use condition (in g/L): 140

National regulations

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Restrictions of occupation

Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.
Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).

15.2. Chemical Safety Assessment

For the following substances of this mixture a chemical safety assessment has been carried out:

EC No. CAS No.	Designation	REACH No.
231-944-3 7779-90-0	Trizinc bis(orthophosphate)	01-2119485044-40
203-961-6 112-34-5	2-(2-butoxyethoxy)ethanol	01-2119475104-44
201-074-9 77-99-6	Propylidynetrimethanol	01-2119486799-10
215-222-5 1314-13-2	zinc oxide	01-2119463881-32
220-120-9 2634-33-5	1,2-Benzisothiazol-3(2H)-one	01-2120761540-60
220-239-6 2682-20-4	2-Methylisothiazol-3(2H)-one	01-2120764690-50
55965-84-9	reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)	01-2120764691-48

SECTION 16: Other information

Full text of classification in section 3:

Aquatic Acute 1 / H400	Hazardous to the aquatic environment	Very toxic to aquatic organisms.
Aquatic Chronic 1 / H410	Hazardous to the aquatic environment	Very toxic to aquatic life with long lasting effects.
Eye Irrit. 2 / H319	Serious eye damage/eye irritation	Causes serious eye irritation.
Repr. 2 / H361fd	Reproductive toxicity	Suspected of damaging fertility. Suspected of damaging the unborn child.
Acute Tox. 2 / H330	Acute toxicity (inhalative)	Fatal if inhaled.
Acute Tox. 4 / H302	Acute toxicity (oral)	Harmful if swallowed.
Skin Irrit. 2 / H315	Skin corrosion/irritation	Causes skin irritation.
Eye Dam. 1 / H318	Serious eye damage/eye irritation	Causes serious eye damage.
Skin Sens. 1A / H317	Respiratory or skin sensitisation	May cause an allergic skin reaction.
Acute Tox. 3 / H301	Acute toxicity (oral)	Toxic if swallowed.
Acute Tox. 3 / H311	Acute toxicity (dermal)	Toxic in contact with skin.
Skin Corr. 1B / H314	Skin corrosion/irritation	Causes severe skin burns and eye damage.
Acute Tox. 2 / H310	Acute toxicity (dermal)	Fatal in contact with skin.
Skin Corr. 1C / H314	Skin corrosion/irritation	Causes severe skin burns and eye damage.

Classification procedure

Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

Skin Sens. 1	Respiratory or skin sensitisation	Calculation method.
Aquatic Chronic 2	Hazardous to the aquatic environment	Calculation method.

Abbreviations and acronyms

ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
OEL	Occupational Exposure Limit Value
BLV	Biological Limit Value
CAS	Chemical Abstracts Service
CLP	Classification, Labelling and Packaging
CMR	Carcinogenic, Mutagenic and Reprotoxic
DIN	German Institute for Standardization / German industrial standard
DNEL	Derived No-Effect Level
EAKV	European Waste Catalogue Directive
EC	Effective Concentration
EC	European Community
EN	European Standard
IATA-DGR	International Air Transport Association – Dangerous Goods Regulations

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IBC Code	International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
ICAO-TI	International Civil Aviation Organization Technical Instructions for the Safe Transport of Dangerous Goods by Air
IMDG Code	International Maritime Code for Dangerous Goods
ISO	International Organization for Standardization
LC	Lethal Concentration
LD	Lethal Dose
MAK	Maximum workplace concentration
MARPOL	Maritime Pollution: The International Convention for the Prevention of Pollution from Ships
OECD	Organisation for Economic Cooperation and Development
PBT	persistent, bioaccumulative, toxic
PNEC	Predicted No Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
UN	United Nations
VOC	Volatile Organic Compounds
vPvB	very persistent and very bioaccumulative

Data sources

Data arise from reference works and literature.

Further information

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

The information supplied on this safety data sheet complies with our current level of knowledge as well as with national and EU regulations. Without written approval, the product must not be used for purposes different from those mentioned in section 1. It is always the user's duty to take any necessary measures for meeting the requirements laid down by local rules and regulations. The details in this safety data sheet describe the safety requirements of our product and are not to be regarded as guaranteed attributes of the product.