Autol

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
Issue date: 5/13/2026 Revision date: 5/13/2026 Supersedes version of: 12/18/2025 Version: 7.2

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

1.1. Product identifier

Product form : Mixture
Product name : Autol
Product code : 10323_0010

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

1.2.1. Relevant identified uses

Intended for general public
Main use category : Professional use,Consumer use
Use of the substance/mixture : Paint

1.2.2. Uses advised against

Restrictions on use : Not to be used for any purpose other than the one the product was designed for

1.3. Details of the supplier of the safety data sheet

Manufacturer
Knauf Gips KG
Am Bahnhof 7
DE 97346 Iphofen, Bayern
Germany
T +49 9323/31-0, F +49 9323/31-277
sds-info@knauf.com, www.knauf.com

1.4. Emergency telephone number

Country/Area	Organisation/Company	Address	Emergency number	Comment
Europe	Global Incident Response (GIR) Hotline		+1 760 476 3962	Access Code: 336325

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Aquatic Chronic 3 H412
Full text of hazard classes, H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

Harmful to aquatic life with long lasting effects.

2.2. Label elements

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

Signal word (CLP) : -

Hazard statements (CLP) : H412 - Harmful to aquatic life with long lasting effects.
Precautionary statements (CLP) : 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 and container to Recycle or dispose of in compliance with current legislation.

EUH-statements	:	EUH208 - Contains octhilinone (ISO); 2-octyl-2H-isothiazol-3-one, reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1), 1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one. May produce an allergic reaction.
Extra phrases	:	Treated article according to Regulation (EU) No 528/2012 to ensure the stability and shelf life. Contains: Biocidal products. Biocide active substances: pyrithione zinc (13463-41-7), terbutryn (886-50-0), 2-octyl-2H-isothiazol-3-one (26530-20-1), 1,2-benzisothiazol-3(2H)-one (2634-33-5), pyridine-2-thiol 1-oxide, sodium salt (3811-73-2). MAXIMUM VOC CONTENT LIMIT VALUES FOR PAINTS AND VARNISHES. Product Subcategory: c (Type: WB): 40 g/l. VOC content: < 2.6 % (≤ 40 g/L).
Child-resistant fastening	:	Not applicable
Tactile warning	:	Not applicable

2.3. Other hazards

Contains no PBT and/or vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

Component	
Substance(s) not meeting the PBT criteria of REACH regulation, in accordance with Annex XIII	2-octyl-2H-isothiazol-3-one (26530-20-1)(¹), pyrithione zinc (13463-41-7)(¹), reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) (55965-84-9)(¹), 1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one (2634-33-5)(¹)
Substance(s) not meeting the vPvB criteria of REACH regulation, in accordance with Annex XIII	2-octyl-2H-isothiazol-3-one (26530-20-1)(¹), pyrithione zinc (13463-41-7)(¹), reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) (55965-84-9)(¹), 1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one (2634-33-5)(¹)

(¹) Substance(s) in concentration below 0.1 % and displayed on a voluntary basis

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Hydrocarbons, C14-C18, n-alkanes, isoalkanes, cyclics, <2% aromatics	EC-No.: 927-632-8 REACH-no: 01-2119457736-27	< 3	Asp. Tox. 1, H304
1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one (Active substance (Biocide))	CAS-No.: 2634-33-5 EC-No.: 220-120-9 EC Index-No.: 613-088-00-6 REACH-no: 01-2120761540-60	< 0.036	Acute Tox. 2 (Inhalation:dust,mist), H330 (ATE=0.21 mg/l) Acute Tox. 4 (Oral), H302 (ATE=450 mg/kg bodyweight) Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
pyridine-2-thiol 1-oxide, sodium salt	CAS-No.: 3811-73-2 EC-No.: 223-296-5 EC Index-No.: 613-344-00-7	< 0.05	Acute Tox. 3 (Inhalation:dust,mist), H331 (ATE=0.5 mg/l) Acute Tox. 3 (Dermal), H311 (ATE=790 mg/kg bodyweight) Acute Tox. 4 (Oral), H302 (ATE=500 mg/kg bodyweight) STOT RE 1, H372 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Acute 1, H400 (M=100) Aquatic Chronic 2, H411 EUH070
pyrithione zinc	CAS-No.: 13463-41-7 EC-No.: 236-671-3 EC Index-No.: 613-333-00-7	< 0.01	Repr. 1B, H360D Acute Tox. 2 (Inhalation:dust,mist), H330 (ATE=0.14 mg/l) Acute Tox. 3 (Oral), H301 (ATE=221 mg/kg bodyweight) STOT RE 1, H372 Eye Dam. 1, H318 Aquatic Acute 1, H400 (M=1000) Aquatic Chronic 1, H410 (M=10)
terbutryn	CAS-No.: 886-50-0 EC-No.: 212-950-5	< 0.01	Acute Tox. 4 (Oral), H302 (ATE=500 mg/kg bodyweight) Skin Sens. 1B, H317 Aquatic Acute 1, H400 (M=100) Aquatic Chronic 1, H410 (M=100)
2-octyl-2H-isothiazol-3-one	CAS-No.: 26530-20-1 EC-No.: 247-761-7 EC Index-No.: 613-112-00-5	< 0.01	Acute Tox. 2 (Inhalation:dust,mist), H330 (ATE=0.27 mg/l) Acute Tox. 3 (Dermal), H311 (ATE=311 mg/kg bodyweight) Acute Tox. 3 (Oral), H301 (ATE=125 mg/kg bodyweight) Skin Corr. 1, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Acute 1, H400 (M=100) Aquatic Chronic 1, H410 (M=100) EUH071
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	CAS-No.: 55965-84-9 EC Index-No.: 613-167-00-5	< 0.0015	Acute Tox. 2 (Inhalation), H330 Acute Tox. 2 (Dermal), H310 Acute Tox. 3 (Oral), 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 limits:

Name	Product identifier	Specific concentration limits (%)
1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one (Active substance (Biocide))	CAS-No.: 2634-33-5 EC-No.: 220-120-9 EC Index-No.: 613-088-00-6 REACH-no: 01-2120761540-60	(0.036 ≤ C ≤ 100) Skin Sens. 1A; H317
2-octyl-2H-isothiazol-3-one	CAS-No.: 26530-20-1 EC-No.: 247-761-7 EC Index-No.: 613-112-00-5	(0.0015 ≤ C ≤ 100) Skin Sens. 1A; H317
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	CAS-No.: 55965-84-9 EC Index-No.: 613-167-00-5	(0.0015 ≤ C ≤ 100) Skin Sens. 1A; H317 (0.06 ≤ C < 0.6) Skin Irrit. 2; H315 (0.06 ≤ C < 0.6) Eye Irrit. 2; H319 (0.6 ≤ C ≤ 100) Eye Dam. 1; H318 (0.6 ≤ C ≤ 100) Skin Corr. 1C; H314

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : If you feel unwell, seek medical advice.
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact : Wash skin with plenty of water.
First-aid measures after eye contact : Get medical advice/attention. Rinse eyes with water as a precaution.
First-aid measures after ingestion : Rinse mouth out with water. Call a poison center or a doctor if you feel unwell.
Self protection of the first-aider : First aid workers will be equipped with suitable personal protective equipment.

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

Symptoms/effects after inhalation : None under normal conditions.
Symptoms/effects after skin contact : None under normal conditions.
Symptoms/effects after eye contact : None under normal conditions.
Symptoms/effects after ingestion : None under normal conditions.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard : No fire hazard.
Explosion hazard : No direct explosion hazard.
Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for firefighters

Firefighting instructions : Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.
Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material damage.

6.1.1. For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.
Emergency procedures : Ventilate spillage area.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures : Evacuate unnecessary personnel. Stop leak if safe to do so.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Absorb spilled material with sand or earth. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak without risks if possible.
Methods for cleaning up : Take up liquid spill into absorbent material.
Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Not expected to present a significant hazard under anticipated conditions of normal use.
Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment. When spraying avoid inhalation of the aerosol. Ventilate the area thoroughly. Prohibit unauthorized persons.
Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Keep in a cool, well-ventilated place away from heat.
Storage conditions : Keep cool. Protect from sunlight.
Heat and ignition sources : KEEP SUBSTANCE AWAY FROM: heat sources. ignition sources.
Packaging materials : Always store product in container of same material as original container.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

Exposure limit values for the other components

quartz, conc respirable crystalline silica<1% (14808-60-7)

EU - Indicative Occupational Exposure Limit (IOEL)

Local name	Silica crystaline (Quartz)	
IOEL TWA	0.05 mg/m³ (respirable dust)	
Remark	(Year of adoption 2003)	

quartz, conc respirable crystalline silica<1% (14808-60-7)		
Regulatory reference	SCOEL Recommendations	
EU - Binding Occupational Exposure Limit (BOEL)		
Local name	Respirable crystalline silica dust	
BOEL TWA	0.1 mg/m³ (Respirable fraction)	
Regulatory reference	DIRECTIVE (EU) 2019/130 (amending Directive 2004/37/EC)	

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:
Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment:
Wear recommended personal protective equipment.
Personal protective equipment symbol(s):

8.2.2.1. Eye and face protection

Eye protection:
Safety glasses

Eye protection			
Type	**Field of application**	**Characteristics**	**Standard**
Safety glasses with side shields	Use splash goggles when eye contact due to splashing is possible		
In case of dust production: protective goggles			

8.2.2.2. Skin protection

Skin and body protection:
Wear suitable protective clothing

Hand protection:
Protective gloves

Hand protection					
Type	**Material**	**Permeation**	**Thickness (mm)**	**Penetration**	**Standard**
Impermeable protective gloves	Nitrile rubber (NBR)				

8.2.2.3. Respiratory protection

Respiratory protection:
Wear breathing apparatus if exposed to vapours/dusts/aerosols. During spraying wear suitable respiratory equipment

Respiratory protection			
Device	**Filter type**	**Condition**	**Standard**
Dust formation: dust mask	Type P2	Milling, grinding and similar activities	

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:
Avoid release to the environment.
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	:	Liquid
Colour	:	According to product specification.
Appearance	:	Viscous.
Odour	:	characteristic.
Odour threshold	:	Not available
Melting point	:	Not applicable
Freezing point	:	Not available
Boiling point	:	100 °C
Flammability	:	Non flammable.
Explosive properties	:	Product is not explosive.
Lower explosion limit	:	Not available
Upper explosion limit	:	Not available
Flash point	:	Not available
Auto-ignition temperature	:	Not self-igniting
Decomposition temperature	:	Not available
pH	:	≈ 9 (20 °C)
Viscosity, kinematic	:	Not available
Solubility	:	Water: completely miscible
Partition coefficient n-octanol/water (Log Kow)	:	Not available
Vapour pressure	:	23 hPa
Vapour pressure at 50°C	:	Not available
Density	:	≈ 1.54 g/cm³
Relative density	:	Not available
Relative vapour density at 20°C	:	Not available
Particle characteristics	:	Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

VOC content : < 2.6 % (≤ 40 g/L)

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

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

Acute toxicity (oral) : Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (dermal) : Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (inhalation) : Not classified (Based on available data, the classification criteria are not met)

terbutryn (886-50-0)	
LD50 oral rat	2045 mg/kg (Rat, Oral)
LD50 dermal rat	> 2000 mg/kg (Rat, Dermal)
LC50 Inhalation - Rat	> 8 mg/l (4 h, Rat, Inhalation)

2-octyl-2H-isothiazol-3-one (26530-20-1)	
LD50 oral rat	550 mg/kg (Rat, Literature study, Oral)
LD50 dermal rabbit	690 mg/kg bodyweight (Rabbit, Literature study, Dermal)
LC50 Inhalation - Rat	> 2 mg/m³ (4 h, Rat, Literature study, Inhalation (vapours))

pyrithione zinc (13463-41-7)	
LD50 oral rat	269 mg/kg bodyweight (OECD 401: Acute Oral Toxicity, Rat, Male / female, Experimental value, Aqueous solution, Oral, 14 day(s))
LD50 dermal rat	> 2000 mg/kg (EPA OPP 81-2, 24 h, Rat, Male / female, Experimental value, Dermal, 14 day(s))
LC50 Inhalation - Rat	1.03 mg/l air (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male / female, Experimental value, Inhalation (aerosol))

reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) (55965-84-9)	
LD50 oral rat	66 mg/kg bodyweight (OECD 401: Acute Oral Toxicity, Rat, Male / female, Experimental value, Calculated by reference to active substance, Oral, 14 day(s))
LD50 dermal rat	> 141 mg/kg bodyweight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal, 14 day(s))

reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) (55965-84-9)	
LC50 Inhalation - Rat	0.17 mg/l air (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male / female, Experimental value, Calculated by reference to active substance, Inhalation (dust), 14 day(s))
pyridine-2-thiol 1-oxide, sodium salt (3811-73-2)	
LD50 oral rat	1208 mg/kg bodyweight (OECD 401: Acute Oral Toxicity, Rat, Female, Experimental value, Oral)
LD50 dermal rabbit	1800 mg/kg bodyweight (EPA OPP 81-2, 24 h, Rabbit, Male / female, Experimental value, Skin, 14 day(s))
LC50 Inhalation - Rat	1.08 mg/l (EPA OPP 81-3: Acute Inhalation Toxicity, 4 h, Rat, Male / female, Experimental value, Inhalation (aerosol), 14 day(s))
Hydrocarbons, C14-C18, n-alkanes, isoalkanes, cyclics, <2% aromatics	
LD50 oral rat	> 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LD50 dermal rabbit	> 3160 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LC50 Inhalation - Rat	> 5266 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity), Remarks on results: other:
1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one (2634-33-5)	
LD50 oral rat	490 mg/kg bodyweight (Equivalent or similar to OECD 401, Rat, Male / female, Experimental value, Oral, 14 day(s))
LD50 dermal rat	> 2000 mg/kg bodyweight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal, 14 day(s))

Skin corrosion/irritation : Not classified (Based on available data, the classification criteria are not met)
pH: ≈ 9 (20 °C)

pyrithione zinc (13463-41-7)	
pH	7 (No data available, 6.3 ppm, 20 °C, OECD 105: Water Solubility)
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) (55965-84-9)	
pH	No data available in the literature
pyridine-2-thiol 1-oxide, sodium salt (3811-73-2)	
pH	No data available in the literature
1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one (2634-33-5)	
pH	No data available in the literature

Serious eye damage/irritation : Not classified (Based on available data, the classification criteria are not met)
pH: ≈ 9 (20 °C)

pyrithione zinc (13463-41-7)	
pH	7 (No data available, 6.3 ppm, 20 °C, OECD 105: Water Solubility)
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) (55965-84-9)	
pH	No data available in the literature
pyridine-2-thiol 1-oxide, sodium salt (3811-73-2)	
pH	No data available in the literature
1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one (2634-33-5)	
pH	No data available in the literature

Respiratory or skin sensitisation	:	Skin sensitization: Not classified (Bridging principle; rLLNA; mouse; (OECD 429 method)). Respiratory sensitization: Not classified (Bridging principle; rLLNA; mouse; (OECD 429 method)).
Germ cell mutagenicity	:	Not classified (Based on available data, the classification criteria are not met)
Carcinogenicity	:	Not classified (Based on available data, the classification criteria are not met)
Reproductive toxicity	:	Not classified (Based on available data, the classification criteria are not met)

Hydrocarbons, C14-C18, n-alkanes, isoalkanes, cyclics, <2% aromatics	
NOAEL (animal/female, F1)	≥ 2000 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 415 [One-Generation Reproduction Toxicity Study (before 9 October 2017)]

STOT-single exposure	:	Not classified (Based on available data, the classification criteria are not met)
STOT-repeated exposure	:	Not classified (Based on available data, the classification criteria are not met)

pyrithione zinc (13463-41-7)	
STOT-repeated exposure	Causes damage to organs through prolonged or repeated exposure.

pyridine-2-thiol 1-oxide, sodium salt (3811-73-2)	
STOT-repeated exposure	Causes damage to organs (nervous system) through prolonged or repeated exposure.

Hydrocarbons, C14-C18, n-alkanes, isoalkanes, cyclics, <2% aromatics	
NOAEL (oral, rat, 90 days)	≥ 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
NOAEL (dermal, rat/rabbit, 90 days)	> 495 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 411 (Subchronic Dermal Toxicity: 90-Day Study)

Aspiration hazard	:	Not classified (Based on available data, the classification criteria are not met)

pyrithione zinc (13463-41-7)	
Viscosity, kinematic	Not applicable (solid)

reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) (55965-84-9)	
Viscosity, kinematic	Not applicable (solid)

pyridine-2-thiol 1-oxide, sodium salt (3811-73-2)	
Viscosity, kinematic	Not applicable (solid)

Hydrocarbons, C14-C18, n-alkanes, isoalkanes, cyclics, <2% aromatics	
Viscosity, kinematic	4.3 – 5.6 mm²/s Temp.: '20°C' Parameter: 'kinematic viscosity (in mm²/s)'

1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one (2634-33-5)	
Viscosity, kinematic	Not applicable (solid)

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Adverse health effects caused by endocrine disrupting properties	:	The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

11.2.2. Other information

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	:	Harmful to aquatic life with long lasting effects.

Hazardous to the aquatic environment, short–term (acute) : Not classified (Based on available data, the classification criteria are not met).

Hazardous to the aquatic environment, long–term (chronic) : Harmful to aquatic life with long lasting effects.

Autol	
EC50 - Crustacea [1]	> 1 mg/l OECD 202; Daphnia magna
EC50 72h - Algae [1]	> 10 mg/l OECD 201; Pseudokirchneriella subcapitata
terbutryn (886-50-0)	
LC50 - Fish [1]	0.82 mg/l (96 h, Salmo gairdneri, Static system, Literature study)
EC50 - Crustacea [1]	7.1 mg/l (48 h, Daphnia magna, Literature study, Locomotor effect)
2-octyl-2H-isothiazol-3-one (26530-20-1)	
LC50 - Fish [1]	0.036 mg/l Oncorhynchus mykiss (Rainbow trout)
LC50 - Fish [2]	0.05 mg/l (96 h, Oncorhynchus mykiss, Literature study)
EC50 - Crustacea [1]	0.42 mg/l (48 h, Daphnia magna, Literature study)
EC50 72h - Algae [1]	0.084 mg/l Desmodesmus subspicatus)
NOEC chronic fish	0.022 mg/l Oncorhynchus mykiss (Rainbow trout)
NOEC chronic crustacea	0.02 mg/l Daphnia magna, 21d
NOEC chronic algae	0.004 mg/l algae
pyrithione zinc (13463-41-7)	
LC50 - Fish [1]	2.6 µg/l (EPA OPP 72-1, 96 h, Pimephales promelas, Flow-through system, Fresh water, Experimental value, GLP)
EC50 - Crustacea [1]	8.2 µg/l (EPA OPP 72-2, 48 h, Daphnia magna, Flow-through system, Fresh water, Experimental value, GLP)
EC50 96h - Algae [1]	1.3 µg/l (EPA OPP 122-2, Skeletonema costatum, Static system, Fresh water, Experimental value, GLP)
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) (55965-84-9)	
LC50 - Fish [1]	0.19 mg/l (EPA OPP 72-1, 96 h, Oncorhynchus mykiss, Flow-through system, Fresh water, Experimental value, GLP)
EC50 - Crustacea [1]	0.007 mg/l (48 h, Acartia tonsa, Salt water, Experimental value, GLP)
ErC50 algae	19.9 µg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Skeletonema costatum, Static system, Salt water, Experimental value, GLP)
pyridine-2-thiol 1-oxide, sodium salt (3811-73-2)	
LC50 - Fish [1]	7.3 µg/l (EPA OPP 72-1, 96 h, Oncorhynchus mykiss, Flow-through system, Fresh water, Experimental value, GLP)
ErC50 algae	0.46 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Experimental value, GLP)
1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one (2634-33-5)	
LC50 - Fish [1]	2.2 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oncorhynchus mykiss, Static system, Experimental value, Nominal concentration)
EC50 - Crustacea [1]	2.9 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Experimental value, Lethal)
ErC50 algae	150 µg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Experimental value, GLP)

12.2. Persistence and degradability

Autol	
Persistence and degradability	Rapidly degradable
terbutryn (886-50-0)	
Persistence and degradability	Biodegradable in the soil, Not readily biodegradable in water.
2-octyl-2H-isothiazol-3-one (26530-20-1)	
Persistence and degradability	Inherently biodegradable.
pyrithione zinc (13463-41-7)	
Persistence and degradability	Not readily biodegradable in water.
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) (55965-84-9)	
Persistence and degradability	Not readily biodegradable in water.
pyridine-2-thiol 1-oxide, sodium salt (3811-73-2)	
Persistence and degradability	Readily biodegradable in water.
Hydrocarbons, C14-C18, n-alkanes, isoalkanes, cyclics, <2% aromatics	
Persistence and degradability	Rapidly degradable
1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one (2634-33-5)	
Persistence and degradability	Not readily biodegradable in water.

12.3. Bioaccumulative potential

terbutryn (886-50-0)	
Partition coefficient n-octanol/water (Log Pow)	3.43 – 3.74 (Literature study)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
2-octyl-2H-isothiazol-3-one (26530-20-1)	
BCF - Fish [1]	1280 (67 day(s), Lepomis macrochirus, Flow-through system, Literature study)
Partition coefficient n-octanol/water (Log Pow)	2.45 (Experimental value)
Bioaccumulative potential	Potential for bioaccumulation (500 ≤ BCF ≤ 5000).
pyrithione zinc (13463-41-7)	
BCF - Other aquatic organisms [1]	7.87 – 11 (OECD 305: Bioconcentration: Flow-Through Fish Test, 30 day(s), Crassostrea sp., Flow-through system, Salt water, Experimental value, Fresh weight)
Partition coefficient n-octanol/water (Log Pow)	0.9 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) (55965-84-9)	
BCF - Fish [1]	41 – 54 (OECD 305: Bioconcentration: Flow-Through Fish Test, 28 day(s), Lepomis macrochirus, Flow-through system, Fresh water, Experimental value, Fresh weight)
Partition coefficient n-octanol/water (Log Pow)	-0.32 – 0.7 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 20 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
pyridine-2-thiol 1-oxide, sodium salt (3811-73-2)	
Partition coefficient n-octanol/water (Log Pow)	-2.7 (Experimental value, EU Method A.8: Partition Coefficient, 20 °C)

pyridine-2-thiol 1-oxide, sodium salt (3811-73-2)	
Bioaccumulative potential	Not bioaccumulative.

1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one (2634-33-5)	
BCF - Fish [1]	6.6 (Equivalent or similar to OECD 305, 56 day(s), Lepomis macrochirus, Experimental value, Fresh weight)
Partition coefficient n-octanol/water (Log Pow)	-0.9 – 0.99 (Experimental value, EU Method A.8: Partition Coefficient, 20 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

12.4. Mobility in soil

terbutryn (886-50-0)	
Ecology - soil	Adsorbs into the soil. Not toxic to bees.

2-octyl-2H-isothiazol-3-one (26530-20-1)	
Ecology - soil	No (test)data on mobility of the substance available.

pyrithione zinc (13463-41-7)	
Surface tension	73 mN/m (20 °C, 7.2 mg/l, OECD 115: Surface Tension of Aqueous Solutions)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	4.295 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
Ecology - soil	Low potential for mobility in soil.

reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) (55965-84-9)	
Surface tension	No data available in the literature
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0.81 – 1 (log Koc, Calculated value)
Ecology - soil	Highly mobile in soil.

pyridine-2-thiol 1-oxide, sodium salt (3811-73-2)	
Ecology - soil	Adsorbs into the soil.

1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one (2634-33-5)	
Surface tension	72.6 mN/m (20 °C, 0.1 %, EU Method A.5: Surface tension)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0.97 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC), Experimental value, GLP)
Ecology - soil	Highly mobile in soil.

12.5. Results of PBT and vPvB assessment

Component	
Substance(s) not meeting the PBT criteria of REACH regulation, in accordance with Annex XIII	2-octyl-2H-isothiazol-3-one (26530-20-1)(¹), pyrithione zinc (13463-41-7)(¹), reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) (55965-84-9)(¹), 1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one (2634-33-5)(¹)
Substance(s) not meeting the vPvB criteria of REACH regulation, in accordance with Annex XIII	2-octyl-2H-isothiazol-3-one (26530-20-1)(¹), pyrithione zinc (13463-41-7)(¹), reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) (55965-84-9)(¹), 1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one (2634-33-5)(¹)

(¹) Substance(s) in concentration below 0.1 % and displayed on a voluntary basis

12.6. Endocrine disrupting properties

Adverse effects on the environment caused by endocrine disrupting properties : The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %.

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional waste regulation : Disposal must be done according to official regulations.
Waste treatment methods : Handle cured product residues as dust-free as possible. . Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations : Disposal must be done according to official regulations.
Product/Packaging disposal recommendations : Disposal must be done according to official regulations.
Additional information : Do not re-use empty containers. The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process. Waste Codes are only suggestions.
European List of Waste (LoW, EC 2000/532) : 08 01 12 - waste paint and varnish other than those mentioned in 08 01 11
17 09 04 - mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.2. UN proper shipping name				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
No supplementary information available				

14.6. Special precautions for user

Overland transport
Not applicable

Transport by sea
Not applicable

Air transport
Not applicable

Inland waterway transport
Not applicable

Rail transport
Not applicable

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (2024/590)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 2024/590 on substances that deplete the ozone layer)

Council Regulation (EC) for the control of dual-use items

Contains no substance subject to the COUNCIL REGULATION (EC) for the control of dual-use items

VOC Directive (2004/42)

VOC content : < 2.6 % (≤ 40 g/L)

Explosives Precursors Regulation (EU 2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (EC 273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

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

SECTION 16: Other information

Indication of changes

Section	Changed item	Comments
	Issue date	**Modified**
	Supersedes	**Modified**
	Revision date	**Modified**
2.2	Precautionary statements (CLP)	**Modified**

Indication of changes		
Section	**Changed item**	**Comments**
2.2	Extra phrases	**Modified**
15.2	Chemical safety assessment	**Modified**

Abbreviations and acronyms:	
ACGIH	American Conference of Governmental Industrial Hygienists
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
CAS-No.	Chemical Abstracts Service number
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
COD	Chemical oxygen demand (COD)
CSA	Chemical safety assessment
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
ED	Endocrine disruptor
EN	European Standard
EWC	European waste catalogue
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
Log Kow	Partition coefficient n-octanol/water (Log Kow)
Log Pow	Partition coefficient n-octanol/water (Log Pow)
MAK	maximum workplace concentration
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
N.O.S.	Not Otherwise Specified
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
OSHA	Occupational Safety Health Administration

Abbreviations and acronyms:	
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
PPE	Personal protection equipment
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
TF	Technical function
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
TWA	Time Weighted Average
VOC	Volatile Organic Compounds
vPvB	Very Persistent and Very Bioaccumulative
UFI	Unique Formula Identifier

Training advice : Normal use of this product shall imply use in accordance with the instructions on the packaging. Carefully comply with the instructions for use. Comply with instructions for use (refer to technical sheet). Comply with the safety procedures. Observe the label precautions. Ensure all national/local regulations are observed.

Full text of H- and EUH-statements:	
Acute Tox. 2 (Dermal)	Acute toxicity (dermal), Category 2
Acute Tox. 2 (Inhalation)	Acute toxicity (inhal.), Category 2
Acute Tox. 2 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 2
Acute Tox. 3 (Dermal)	Acute toxicity (dermal), Category 3
Acute Tox. 3 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 3
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment – Chronic Hazard, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment – Chronic Hazard, Category 3
Asp. Tox. 1	Aspiration hazard, Category 1
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Repr. 1B	Reproductive toxicity, Category 1B
Skin Corr. 1	Skin corrosion/irritation, Category 1
Skin Corr. 1C	Skin corrosion/irritation, Category 1, Sub-Category 1C
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
Skin Sens. 1A	Skin sensitisation, category 1A

Full text of H- and EUH-statements:	
Skin Sens. 1B	Skin sensitisation, category 1B
STOT RE 1	Specific target organ toxicity – Repeated exposure, Category 1
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
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.
H360D	May damage the unborn child.
H372	Causes damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
EUH070	Toxic by eye contact.
EUH071	Corrosive to the respiratory tract.
EUH208	Contains octhilinone (ISO); 2-octyl-2H-isothiazol-3-one, reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1), 1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one. May produce an allergic reaction.

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:		
Aquatic Chronic 3	H412	Calculation method

KNAUF SDS EU (REACH Annex II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.