

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

No additional information available

1.3. Details of the supplier of the safety data sheet

Supplier Technical information service
 Knauf Gips KG T +49 (0)9001/31-2000 (see section 16)
 Am Bahnhof, 7 knauf-direkt@knauf.de
 DE- 97346 Iphofen – Bayern
 Germany
 T 09323/31-0 - F 09323/31-277
zentrale@knauf.de - www.knauf.de
 E-mail address of competent person responsible for the SDS : sds-info@knauf.com

1.4. Emergency telephone number

No additional information available

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

No additional information available

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.
 P273 - Avoid release to the environment.
 P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
 EUH-statements : EUH208 - Contains mixture of: 5-chloro-2-methyl-2H-isothiazol-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, 2-octyl-2H-isothiazol-3-one. May produce an allergic reaction.
 EUH210 - Safety data sheet available on request.
 EUH211 - Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

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Extra phrases : Treated article according to Regulation (EU) No 528/2012 to ensure the stability and shelf life.
Contains pyridine-2-thiol 1-oxide, sodium salt (3811-73-2), pyriithione zinc (13463-41-7), terbutryn (886-50-0).
MAXIMUM VOC CONTENT LIMIT VALUES FOR PAINTS AND VARNISHES. Product Subcategory: c (Type: WB): 40 g/l.
VOC content: < 2,6 % (≤ 40 g/L).

2.3. Other hazards

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

Component	
1,2-benzisothiazol-3(2H)-one (2634-33-5)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
2-octyl-2H-isothiazol-3-one (26530-20-1)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
pyriithione zinc (13463-41-7)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1) (55965-84-9)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

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 is 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

3.1. Substances

Not applicable

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	< 10	Asp. Tox. 1, H304
terbutryn	CAS-No.: 886-50-0 EC-No.: 212-950-5	< 0,1	Acute Tox. 4 (Oral), H302 Skin Sens. 1B, H317 Aquatic Acute 1, H400 (M=100) Aquatic Chronic 1, H410 (M=100)
1,2-benzisothiazol-3(2H)-one	CAS-No.: 2634-33-5 EC-No.: 220-120-9 EC Index-No.: 613-088-00-6	< 0,05	Acute Tox. 4 (Oral), H302 Acute Tox. 2 (Inhalation), H330 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 2, H411

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Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
2-octyl-2H-isothiazol-3-one	CAS-No.: 26530-20-1 EC-No.: 247-761-7 EC Index-No.: 613-112-00-5	< 0,1	Acute Tox. 2 (Inhalation), H330 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Oral), H301 Skin Corr. 1, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Acute 1, H400 (M=100) Aquatic Chronic 1, H410 (M=100)
pyrithione zinc (Active substance (Biocide))	CAS-No.: 13463-41-7 EC-No.: 236-671-3 EC Index-No.: 613-333-00-7	< 0,1	Repr. 1B, H360D Acute Tox. 2 (Inhalation), H330 Acute Tox. 3 (Oral), H301 STOT RE 1, H372 Eye Dam. 1, H318 Aquatic Acute 1, H400 (M=1000) Aquatic Chronic 1, H410 (M=10)
pyridine-2-thiol 1-oxide, sodium salt	CAS-No.: 3811-73-2 EC-No.: 223-296-5	< 0,1	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation), H332 Eye Dam. 1, H318 Aquatic Acute 1, H400 (M=100) Aquatic Chronic 2, H411
mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (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)

Specific concentration limits:

Name	Product identifier	Specific concentration limits
1,2-benzisothiazol-3(2H)-one	CAS-No.: 2634-33-5 EC-No.: 220-120-9 EC Index-No.: 613-088-00-6	(0,05 ≤C ≤ 100) Skin Sens. 1, 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
mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (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 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	: Rinse eyes with water as a precaution. Get medical advice/attention.
First-aid measures after ingestion	: Call a poison center or a doctor if you feel unwell. Rinse mouth out with water.

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

No additional information available

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.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for firefighters

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

6.1.1. For non-emergency personnel

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".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

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

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

Storage conditions : Store in a well-ventilated place. Keep cool.
Heat and ignition sources : KEEP SUBSTANCE AWAY FROM: heat sources. ignition sources.

7.3. Specific end use(s)

No additional information available

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

No additional information available

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 symbol(s):



8.2.2.1. Eye and face protection

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:

In case of insufficient ventilation, wear suitable respiratory equipment. Wear breathing apparatus if exposed to vapours/dusts/aerosols. During spraying wear suitable respiratory equipment

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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 available
Freezing point	: Not available
Boiling point	: 100 °C
Flammability	: Not available
Explosive properties	: Product is not explosive.
Explosive limits	: Not available
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/cm ³
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.

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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
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

1,2-benzisothiazol-3(2H)-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))
ATE CLP (oral)	1020 mg/kg bodyweight
ATE CLP (gases)	100 ppmv/4h
ATE CLP (vapours)	0,5 mg/l/4h
ATE CLP (dust,mist)	0,05 mg/l/4h

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/m ³ (4 h, Rat, Literature study, Inhalation (vapours))
ATE CLP (oral)	125 mg/kg bodyweight
ATE CLP (dermal)	311 mg/kg bodyweight
ATE CLP (gases)	100 ppmv/4h
ATE CLP (vapours)	0,5 mg/l/4h
ATE CLP (dust,mist)	0,27 mg/l

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

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mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (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 (aerosol), 14 day(s))
ATE CLP (oral)	53 mg/kg bodyweight
ATE CLP (dermal)	200 mg/kg bodyweight
ATE CLP (gases)	700 ppmv/4h
ATE CLP (vapours)	3 mg/l/4h
ATE CLP (dust,mist)	0,5 mg/l/4h
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:
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))
ATE CLP (oral)	870 mg/kg bodyweight
ATE CLP (dermal)	300 mg/kg bodyweight
ATE CLP (gases)	4500 ppmv/4h
ATE CLP (vapours)	11 mg/l/4h
ATE CLP (dust,mist)	1,5 mg/l/4h
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)
ATE CLP (oral)	500 mg/kg bodyweight
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))
ATE CLP (oral)	221 mg/kg bodyweight
ATE CLP (gases)	100 ppmv/4h
ATE CLP (vapours)	0,5 mg/l/4h

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pyrithione zinc (13463-41-7)	
ATE CLP (dust,mist)	0,14 mg/l
Skin corrosion/irritation	: Not classified pH: ≈ 9 (20 °C)
Serious eye damage/irritation	: Not classified pH: ≈ 9 (20 °C)
Respiratory or skin sensitisation	: Not classified. (Bridging principle. rLLNA. mouse. (OECD 429 method))
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified

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
STOT-repeated exposure	: Not classified

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)

pyrithione zinc (13463-41-7)	
STOT-repeated exposure	Causes damage to organs through prolonged or repeated exposure.
Aspiration hazard	: Not classified

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute) : Not classified.
Hazardous to the aquatic environment, long-term (chronic) : Harmful to aquatic life with long lasting effects.

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EC50 - Crustacea [1]	> 1 mg/l OECD 202; Daphnia magna
EC50 72h - Algae [1]	> 10 mg/l OECD 201; Pseudokirchneriella subcapitata

1,2-benzisothiazol-3(2H)-one (2634-33-5)	
LC50 - Fish [1]	2,18 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oncorhynchus mykiss, Static system, Experimental value, Nominal concentration)
EC50 - Crustacea [1]	2,94 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)

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)

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2-octyl-2H-isothiazol-3-one (26530-20-1)	
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
mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1) (55965-84-9)	
EC50 - Crustacea [1]	0,007 mg/l (48 h, Acartia tonsa, 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)
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)
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)
12.2. Persistence and degradability	
1,2-benzisothiazol-3(2H)-one (2634-33-5)	
Persistence and degradability	Not readily biodegradable in water.
2-octyl-2H-isothiazol-3-one (26530-20-1)	
Persistence and degradability	Inherently biodegradable.
mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (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.
terbutryn (886-50-0)	
Persistence and degradability	Biodegradable in the soil. Not readily biodegradable in water.
pyrithione zinc (13463-41-7)	
Persistence and degradability	Not readily biodegradable in water.

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12.3. Bioaccumulative potential

1,2-benzisothiazol-3(2H)-one (2634-33-5)

BCF - Fish [1]	6,62 (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).

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).

mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (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)	0,75 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 24 °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)
Bioaccumulative potential	Not bioaccumulative.

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).

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).

12.4. Mobility in soil

1,2-benzisothiazol-3(2H)-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.

2-octyl-2H-isothiazol-3-one (26530-20-1)

Ecology - soil	No (test)data on mobility of the substance available.
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mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1) (55965-84-9)

Surface tension	No data available in the literature
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mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1) (55965-84-9)

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.

terbutryn (886-50-0)

Ecology - soil Adsorbs into the soil. Not toxic to bees.

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.

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
Handle cured product residues as dust-free as possible.

European List of Waste (LoW) code : 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

14.1. UN number or ID number

UN-No. (ADR) : Not applicable
UN-No. (IMDG) : Not applicable
UN-No. (IATA) : Not applicable
UN-No. (ADN) : Not applicable
UN-No. (RID) : Not applicable

14.2. UN proper shipping name

Proper Shipping Name (ADR) : Not applicable
Proper Shipping Name (IMDG) : Not applicable
Proper Shipping Name (IATA) : Not applicable
Proper Shipping Name (ADN) : Not applicable
Proper Shipping Name (RID) : Not applicable

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14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : Not applicable

IMDG

Transport hazard class(es) (IMDG) : Not applicable

IATA

Transport hazard class(es) (IATA) : Not applicable

ADN

Transport hazard class(es) (ADN) : Not applicable

RID

Transport hazard class(es) (RID) : Not applicable

14.4. Packing group

Packing group (ADR) : Not applicable

Packing group (IMDG) : Not applicable

Packing group (IATA) : Not applicable

Packing group (ADN) : Not applicable

Packing group (RID) : Not applicable

14.5. Environmental hazards

Dangerous for the environment : No

Marine pollutant : No

Other information : 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

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

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Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

Contains no substance subject to REGULATION (EU) No 1005/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 September 2009 on substances that deplete the ozone layer.

Contains no substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors.

VOC content : < 2,6 % (≤ 40 g/L)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on drug precursors)

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Indication of changes			
Section	Changed item	Change	Comments
	Issue date	Added	
	Supersedes	Modified	
	Revision date	Modified	
	Extra phrases	Modified	
1.1	Name	Modified	
2.2	Precautionary statements (CLP)	Modified	
2.2	EUH-statements	Modified	
3	Composition/information on ingredients	Modified	
11.1	Reason for no classification	Added	

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. 3 (Dermal)	Acute toxicity (dermal), Category 3
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
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
EUH208	Contains mixture of: 5-chloro-2-methyl-2H-isothiazol-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, 2-octyl-2H-isothiazol-3-one. May produce an allergic reaction.
EUH210	Safety data sheet available on request.
EUH211	Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.
Eye Dam. 1	Serious eye damage/eye irritation, Category 1

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Full text of H- and EUH-statements:	
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
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.
H332	Harmful 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.
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
Skin Sens. 1B	Skin sensitisation, category 1B
STOT RE 1	Specific target organ toxicity – Repeated exposure, Category 1

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.