

Fassadol Metallic (mit zusätzlicher bioziden Einstellung)



Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
Issue date: 2022/12/1 Revision date: 2022/5/20 Supersedes version of: 2022/1/14 Version: 4.0

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

1.1. Product identifier

Product form : Mixture
Product name : Fassadol Metallic (mit zusätzlicher bioziden Einstellung)
Product code : 15317_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 : Plating agent

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Supplier

Knauf Gips KG
Am Bahnhof, 7
DE- 97346 Iphofen – Bayern
Germany
T +49 9323/31-0 - F +49 9323/31-277
zentrale@knauf.de - www.knauf.de
E-mail address of competent person responsible for the SDS : sds-info@knauf.com

Technical information

Technical information service
T +49 (0)9001/31-2000 (see section 16)
knauf-direkt@knauf.de

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.
P262 - Do not get in eyes, on skin, or on clothing.
P273 - Avoid release to the environment.
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), 2-methyl-2H-isothiazol-3-one, 1,2-benzisothiazol-3(2H)-one, 2-octyl-2H-isothiazol-3-one. May produce an allergic reaction.
EUH210 - Safety data sheet available on request.
Extra phrases : Treated article according to Regulation (EU) No 528/2012 to ensure the stability and shelf life.

Fassadol Metallic (mit zusätzlicher bioziden Einstellung)

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Contains pyridine-2-thiol 1-oxide, sodium salt (3811-73-2), pyrithione 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: < 2,5 % (< 2,5 g/L).

2.3. Other hazards

Contains no PBT/vPvB substances $\geq 0.1\%$ 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
pyrithione 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
2-methyl-2H-isothiazol-3-one (2682-20-4)	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]
2-butoxyethanol substance with a Community workplace exposure limit	CAS-No.: 111-76-2 EC-No.: 203-905-0 EC Index-No.: 603-014-00-0 REACH-no: 01-2119475108-36	< 3	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Acute Tox. 4 (Inhalation:vapour), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319
terbutryn	CAS-No.: 886-50-0 EC-No.: 212-950-5	< 0,01	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

Fassadol Metallic (mit zusätzlicher bioziden Einstellung)

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

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)
2-methyl-2H-isothiazol-3-one	CAS-No.: 2682-20-4 EC-No.: 220-239-6 EC Index-No.: 613-326-00-9	< 0,0015	Acute Tox. 2 (Inhalation), H330 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Oral), H301 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410

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

Fassadol Metallic (mit zusätzlicher bioziden Einstellung)

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Specific concentration limits:		
Name	Product identifier	Specific concentration limits
2-methyl-2H-isothiazol-3-one	CAS-No.: 2682-20-4 EC-No.: 220-239-6 EC Index-No.: 613-326-00-9	(0,0015 ≤C ≤ 100) Skin Sens. 1A, H317

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	: Remove contaminated clothing and shoes.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Get medical advice/attention if you feel unwell.
First-aid measures after skin contact	: Rinse and then wash skin thoroughly with water and soap. Do not use solvents or thinners.
First-aid measures after eye contact	: Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Rinse mouth thoroughly with water. Drink plenty of water. Get medical advice/attention.

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

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: The product is not flammable. Adapt extinguishing media to the environment for surrounding fires. Water spray. Foam. Dry powder. Carbon dioxide.
Unsuitable extinguishing media	: Strong water jet.

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

Protection during firefighting	: Self-contained breathing apparatus. Complete protective clothing.
--------------------------------	---

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Ensure adequate air ventilation.
------------------	------------------------------------

6.1.1. For non-emergency personnel

No additional information available

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Prevent entry to sewers and public waters. Avoid release to the environment. Notify authorities if liquid enters sewers or public waters.

Fassadol Metallic (mit zusätzlicher bioziden Einstellung)

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

6.3. Methods and material for containment and cleaning up

- For containment : Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Disposal must be done according to official regulations.
- Other information : Spill area may be slippery.

6.4. Reference to other sections

7.1. Precautions for safe handling. 8. Exposure controls/personal protection. For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Avoid contact with skin and eyes. Do not breathe gas/fumes/vapour/spray.
- Hygiene measures : Do not eat, drink or smoke when using this product. Keep away from food, drink and animal feeding stuffs. Wash contaminated clothing before reuse. Wash hands before breaks and after work.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Keep only in original container. Keep out of frost. Protect from sunlight. Store in a well-ventilated place.

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

2-butoxyethanol (111-76-2)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	2-Butoxyethanol
IOEL TWA	98 mg/m ³
IOEL TWA [ppm]	20 ppm
IOEL STEL	246 mg/m ³
IOEL STEL [ppm]	50 ppm
Remark	Skin
Regulatory reference	COMMISSION DIRECTIVE 2000/39/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

No additional information available

Fassadol Metallic (mit zusätzlicher bioziden Einstellung)

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

8.2.2. Personal protection equipment

Personal protective equipment:

Wear suitable protective clothing.

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection:

Use splash goggles when eye contact due to splashing is possible

Eye protection			
Type	Field of application	Characteristics	Standard
Safety glasses with side shields			

8.2.2.2. Skin protection

Hand protection:

Protective gloves

Hand protection					
Type	Material	Permeation	Thickness (mm)	Penetration	Standard
	Nitrile rubber (NBR), Butyl rubber				

8.2.2.3. Respiratory protection

Respiratory protection:

No respiratory protection needed under normal use conditions

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

No additional information available

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Various colours.
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

Fassadol Metallic (mit zusätzlicher bioziden Einstellung)

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Solubility	: Water: completely miscible
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: 23 hPa (20 °C)
Vapour pressure at 50°C	: Not available
Density	: 1,02 g/cm ³ (20 °C)
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 : < 2,5 % (< 2,5 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 of use.

10.3. Possibility of hazardous reactions

None under normal use.

10.4. Conditions to avoid

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

10.5. Incompatible materials

No 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

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))
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

Fassadol Metallic (mit zusätzlicher bioziden Einstellung)

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

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)	
ATE CLP (gases)	700 ppmv/4h
ATE CLP (vapours)	3 mg/l/4h
ATE CLP (dust,mist)	0,5 mg/l/4h
2-methyl-2H-isothiazol-3-one (2682-20-4)	
LD50 oral rat	120 mg/kg bodyweight (EPA OPPTS 870.1100: Acute Oral Toxicity, Rat, Female, Experimental value, Oral, 7 day(s))
LD50 dermal rat	242 mg/kg bodyweight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal, 14 day(s))
LC50 Inhalation - Rat	0,11 mg/l (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male / female, Experimental value, Inhalation (aerosol), 7 day(s))
ATE CLP (oral)	120 mg/kg bodyweight
ATE CLP (dermal)	242 mg/kg bodyweight
ATE CLP (gases)	100 ppmv/4h
ATE CLP (vapours)	0,11 mg/l/4h
ATE CLP (dust,mist)	0,11 mg/l/4h
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-butoxyethanol (111-76-2)	
ATE CLP (oral)	1200 mg/kg bodyweight
ATE CLP (dermal)	1100 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
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

Fassadol Metallic (mit zusätzlicher bioziden Einstellung)

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

pyridine-2-thiol 1-oxide, sodium salt (3811-73-2)	
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
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
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
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
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
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

Fassadol Metallic (mit zusätzlicher bioziden Einstellung)

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

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.

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)

2-methyl-2H-isothiazol-3-one (2682-20-4)

ErC50 algae 0,23 mg/l (Equivalent or similar to OECD 201, 96 h, Pseudokirchneriella subcapitata, Static system, Experimental value, GLP)

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)

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)

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)

Fassadol Metallic (mit zusätzlicher bioziden Einstellung)

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

12.2. Persistence and degradability

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.

2-methyl-2H-isothiazol-3-one (2682-20-4)

Persistence and degradability Not readily biodegradable in water.

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

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.

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.

12.3. Bioaccumulative potential

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).

2-methyl-2H-isothiazol-3-one (2682-20-4)

BCF - Fish [1] 5,75 – 48,1 (56 day(s), Lepomis macrochirus, Flow-through system, Fresh water, Experimental value)
Partition coefficient n-octanol/water (Log Pow) -0,486 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 25 °C)
Bioaccumulative potential Low potential for bioaccumulation (BCF < 500).

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).

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)

Fassadol Metallic (mit zusätzlicher bioziden Einstellung)

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

terbutryn (886-50-0)	
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).
12.4. Mobility in soil	
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
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0,81 – 1 (log Koc, Calculated value)
Ecology - soil	Highly mobile in soil.
2-methyl-2H-isothiazol-3-one (2682-20-4)	
Surface tension	68,8 mN/m (19.5 °C, 1 g/l, OECD 115: Surface Tension of Aqueous Solutions)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1,06 (log Koc, OECD 106: Adsorption/Desorption Using a Batch Equilibrium Method, Experimental value, GLP)
Ecology - soil	Highly mobile 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.
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.
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.

Fassadol Metallic (mit zusätzlicher bioziden Einstellung)

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

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

Regional legislation (waste)	: Disposal must be done according to official regulations.
Product/Packaging disposal recommendations	: Do not dispose of the packaging without first carrying out the necessary cleaning. Disposal must be done according to official regulations. Entrust the thoroughly decontaminated packaging to a licensed waste-contractor.
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

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

Fassadol Metallic (mit zusätzlicher bioziden Einstellung)

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

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 substance(s) listed on REACH Annex XVII (Restriction Conditions)

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

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

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

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

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

Contains substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

ANNEX II REPORTABLE EXPLOSIVES PRECURSORS

List of substances on their own or in mixtures or in substances for which suspicious transactions and significant disappearances and thefts are to be reported to the relevant national contact point within 24 hours.

Name	CAS-No.	Combined Nomenclature code (CN)	Combined Nomenclature code for mixture without constituents which would determine classification under another CN code
------	---------	---------------------------------	--

Please see https://ec.europa.eu/home-affairs/system/files/2021-11/list_of_competent_authorities_and_national_contact_points_en.pdf

VOC content : < 2,5 % (< 2,5 g/L)

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

No additional information available

Fassadol Metallic (mit zusätzlicher bioziden Einstellung)

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

SECTION 16: Other information

Indication of changes			
Section	Changed item	Change	Comments
	Supersedes	Modified	
	Revision date	Modified	
2.1	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Modified	
2.2	EUH-statements	Added	
2.2	Extra phrases	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 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Acute Tox. 4 (Inhalation:vapour)	Acute toxicity (inhalation:vapour) 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
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), 2-methyl-2H-isothiazol-3-one, 1,2-benzisothiazol-3(2H)-one, 2-octyl-2H-isothiazol-3-one. May produce an allergic reaction.
EUH210	Safety data sheet available on request.
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H310	Fatal in contact with skin.
H311	Toxic in contact with skin.
H312	Harmful 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.

Fassadol Metallic (mit zusätzlicher bioziden Einstellung)

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Full text of H- and EUH-statements:	
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. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B
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.