

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

1.1. Product identifier

Product form : Mixture
Product name : Fassadol TSR

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 Bauprodukte GmbH & Co. KG
Am Bahnhof 7
97346 Iphofen - Germany
T 09323 / 31-0
info@knauf-bauprodukte.de - www.knauf-bauprodukte.de
E-mail address of competent person responsible for the SDS : sds-info@knauf.de

Technical information

Technical information service Knauf Bauprodukte
T +49 (0) 1805/31-9000 (0,14 €/Min. aus dem deutschen Festnetz,
Mobilfunk max. 0,42€/Min. möglich)
KnaufBP-Direkt@Knauf-Bauprodukte.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] Extra labelling to display Extra classification(s) to display

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.
P260 - Do not breathe dusts or mists.
P262 - Do not get in eyes, on skin, or on clothing.
P273 - Avoid release to the environment.
EUH-statements : EUH208 - Contains 1,2-benzisothiazol-3(2H)-one (2634-33-5), 2-methyl-2H-isothiazol-3-one (2682-20-4), 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), 2-octyl-2H-isothiazol-3-one (26530-20-1), terbutryn (886-50-0). 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.
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), pyriothione zinc (13463-41-7) MAXIMUM VOC CONTENT LIMIT VALUES FOR PAINTS AND VARNISHES. Product Subcategory: c (Type: WB): 40 g/l
VOC content: < 2 % (≤ 40 g/L)

2.3. Other hazards

No additional information available

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]
quartz, conc respirable crystalline silica<1% substance with a Community workplace exposure limit	(CAS-No.) 14808-60-7 (EC-No.) 238-878-4	< 5	Not classified
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
pyrithione zinc	(CAS-No.) 13463-41-7 (EC-No.) 236-671-3	< 0,01	Acute Tox. 3 (Oral), H301 Acute Tox. 2 (Inhalation:dust,mist), H330 Eye Dam. 1, H318 Aquatic Acute 1, H400 (M=100) Aquatic Chronic 1, H410
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)

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.

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

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

quartz, conc respirable crystalline silica<1% (14808-60-7)		
EU	Local name	Silica crystalline (Quartz)
EU	IOEL TWA	0,1 mg/m ³ (Respirable fraction)
EU	Notes	(Year of adoption 2003)

8.2. Exposure controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

Hand protection:

Protective gloves

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

Eye protection:

Type	Field of application	Characteristics	Standard
Safety glasses with side shields	Use splash goggles when eye contact due to splashing is possible		

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according to Regulation (EU) 2015/830

In case of dust production: protective goggles			
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Skin and body protection:

Wear suitable protective clothing

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

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



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	: Various.
Odour	: characteristic.
Odour threshold	: No data available
pH	: ≈ 9 (20 °C)
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: 100 °C
Flash point	: No data available
Auto-ignition temperature	: Not self-igniting
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 1,55 g/cm ³ (20 °C)
Solubility	: Water: completely miscible
Partition coefficient n-octanol/water (Log Pow)	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: Product is not explosive.
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

VOC content	: < 2 % (≤ 40 g/L)
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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 toxicological effects

Acute toxicity : Not classified

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)

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)
LC50 Inhalation - Rat	1,03 mg/l air (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male / female, Experimental value, Inhalation (aerosol))

pyridine-2-thiol 1-oxide, sodium salt (3811-73-2)	
LD50 oral	870 mg/kg (Mouse, Oral)

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

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

Aspiration hazard : Not classified

SECTION 12: Ecological information

12.1. Toxicity

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)

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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)
ErC50 algae	4,1 µg/l (EPA OPP 122-2, 120 h, Static system, Fresh water, Experimental value, GLP)

pyridine-2-thiol 1-oxide, sodium salt (3811-73-2)	
LC50 - Fish [1]	0,0073 mg/l (EPA OPP 72-1, 96 h, Salmo gairdneri, Flow-through system, Fresh water, Experimental value)
EC50 - Crustacea [1]	0,15 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Experimental value)
ErC50 algae	0,46 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Experimental value)

12.2. Persistence and degradability

terbutryn (886-50-0)	
Persistence and degradability	Biodegradable in the soil. Not readily biodegradable in water.

pyrithione zinc (13463-41-7)	
Persistence and degradability	Inherently biodegradable.

pyridine-2-thiol 1-oxide, sodium salt (3811-73-2)	
Persistence and degradability	Readily biodegradable in water.

quartz, conc respirable crystalline silica<1% (14808-60-7)	
Persistence and degradability	Biodegradability: not applicable. No (test)data on mobility of the substance available.
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable

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).

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)
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).

pyridine-2-thiol 1-oxide, sodium salt (3811-73-2)	
Partition coefficient n-octanol/water (Log Pow)	-2,64 (Test data, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 20 °C)
Bioaccumulative potential	Not bioaccumulative.

quartz, conc respirable crystalline silica<1% (14808-60-7)	
Bioaccumulative potential	No bioaccumulation data available.

12.4. Mobility in soil

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

pyrithione zinc (13463-41-7)	
Surface tension	0,073 N/m (20 °C, 7220 µg/l, OECD 115: Surface Tension of Aqueous Solutions)
Ecology - soil	No (test)data on mobility of the substance available.

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

quartz, conc respirable crystalline silica<1% (14808-60-7)	
Ecology - soil	Low potential for mobility in soil.

12.5. Results of PBT and vPvB assessment

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according to Regulation (EU) 2015/830

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

12.6. 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.

SECTION 14: Transport information

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

ADR	IMDG	IATA	ADN	RID
14.1. UN 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
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. Transport in bulk according to Annex II of Marpol and the IBC Code

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 $\geq 0,1\%$ / SCL

Contains no REACH Annex XIV substances

VOC content : < 2 % (≤ 40 g/L)

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

This safety data sheet replaces the previous version of 2020/03/19. The following changes were made:

Indication of changes:			
Section	Changed item	Change	Comments
2.2	EUH-statements	Modified	
2.2	Precautionary statements (CLP)	Modified	
3	Composition/information on ingredients	Modified	
7.1	Precautions for safe handling	Modified	
8.2	Consumer exposure controls	Added	
8.2	Respiratory protection	Modified	
13.1	Waste treatment methods	Modified	

Full text of H- and EUH-statements:

Acute Tox. 2 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 2
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
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Skin Sens. 1B	Skin sensitisation, category 1B
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H330	Fatal if inhaled.
H332	Harmful if inhaled.
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.
EUH208	Contains 1,2-benzisothiazol-3(2H)-one (2634-33-5), 2-methyl-2H-isothiazol-3-one (2682-20-4), 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), 2-octyl-2H-isothiazol-3-one (26530-20-1), terbutryn (886-50-0). 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.

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.