Safety Data Sheet



Safety Data Sheet dated 04/09/2023 version 3



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

1.1. Product identifier

Mixture identification:

Trade name: RSR 421 Trade code: COL421N UFI: G551-104G-500K-59FK

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

Recommended use: Water-based coating for walls

1.3. Details of the supplier of the safety data sheet

Company: FASSA Srl

Via Lazzaris, 3 - 31027 Spresiano (TV) - ITALY

Tel. +39 0422 7222 Fax +39 0422 887509

Responsable: laboratorio.spresiano@fassabortolo.it

1.4. Emergency telephone number

NHS 111

SECTION 2: Hazards identification



2.1. Classification of the substance or mixture

Regulation (EC) n. 1272/2008 (CLP)

Skin Sens. 1 May cause an allergic skin reaction.

Aquatic Chronic 3 Harmful to aquatic life with long lasting effects. Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Regulation (EC) No 1272/2008 (CLP):

Pictograms and Signal Words



Warning

Hazard statements

H317 May cause an allergic skin reaction.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P261 Avoid breathing fume/gas/mist/vapours/spray.

P280 Wear protective gloves/clothing.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P501 Dispose of contents/container in accordance with national regulation.

Special Provisions:

EUH211 Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

Contains:

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)

Date 05/09/2023 Production Name RSR 421 Page n. 1 of 12

Special provisions according to Annex XVII of REACH and subsequent amendments:

None.

2.3. Other hazards

No PBT, vPvB or endocrine disruptor substances present in concentration >= 0.1%

Contains biocide with fungicide and algicide properties for dry films. Active substances: 2-octyl-2H-isothiazol-3-one (CAS 26530-20-1), pyrithione zinc (CAS 13463-41-7), terbutryn (CAS 886-50-0). In accordance with art. 58 of Regulation no. 528/2012, this product is defined as a "treated article" (not a biocidal product).

No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Mixture identification: RSR 421

≥0.00015 - reaction mass of 5-chloro-2-

methyl-2H-isothiazol-3-one (3:1) 00-5

Hazardous components within the meaning of the CLP regulation and related classification:

Qty	Name	Ident. Numb.	Classification	Registration Number:
≥1 - <3 %	titanium dioxide	CAS:13463-67-7 EC:236-675-5 Index:022-006- 00-2	Carc. 2, H351	01-2119489379-17-xxxx
≥0.05 - <0.1 %	Silica crystalline, quartz (respirable fraction)	CAS:14808-60-7 EC:238-878-4	STOT RE 1, H372	Exempted
≥0.025 - <0.05 %	Silica crystalline, cristobalite (respirable fraction)	CAS:14464-46-1	STOT RE 1, H372	
≥0.005 - <0.025 %	pyrithione zinc	EC:236-671-3	Acute Tox. 2, H330 Acute Tox. 3, H301 Eye Dam. 1, H318 STOT RE 1, H372 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 Repr. 1B, H360D, M-Chronic:10, M- Acute:1000 Acute Toxicity Estimate:	
			ATE - Oral: 221mg/kg bw ATE - Inhalation (Dust/mist): 0.14mg/l	
≥0.005 - <0.025 %	Terbutryn	CAS:886-50-0 EC:212-950-5	Acute Tox. 4, H302 Skin Sens. 1B, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410, M- Chronic:100, M-Acute:100	
			Specific Concentration Limits: $C \ge 3\%$: Skin Sens. 1B H317	
≥0.0015 - <0.005 %	2-octyl-2H-isothiazol-3-one	EC:247-761-7	Acute Tox. 3, H311 Acute Tox. 3, H301 Eye Dam. 1, H318 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 Skin Sens. 1A, H317 Skin Corr. 1, H314 Acute Tox. 2, H330, M-Chronic:100, M-Acute:100, EUH071	
			Specific Concentration Limits: C ≥ 0.0015%: Skin Sens. 1A H317	,
			Acute Toxicity Estimate: ATE - Oral: 125mg/kg bw ATE - Dermal: 311mg/kg bw ATE - Inhalation (Dust/mist): 0.27mg/l	

 Date
 05/09/2023
 Production Name
 RSR 421
 Page n. 2 of 12

<0.0015 % methyl-2H-isothiazol-3-one and 2- Index:613-167- H310 Acute Tox. 3, H301 Skin

CAS:55965-84-9 Acute Tox. 2, H330 Acute Tox. 2,

Corr. 1C, H314 Eye Dam. 1, H318

Skin Sens. 1A, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410, M-Chronic:100, M-Acute:100, FUH071

Specific Concentration Limits: $0.6\% \le C < 100\%$: Skin Corr. 1C H314 $0.06\% \le C < 0.6\%$: Skin Irrit. 2

H315 $0.6\% \le C < 100\%$: Eye Dam. 1

H318 $0.06\% \le C < 0.6\%$: Eye Irrit. 2

H319

 $0.0015\% \le C < 100\%$: Skin Sens.

1A H317

Acute Toxicity Estimate: ATE - Oral: 100mg/kg bw ATE - Dermal: 50mg/kg bw ATE - Inhalation (Dust/mist):

0.05mg/l

≥0.00015 - 2-methylisothiazol-3(2H)-one <0.0015 %

CAS:2682-20-4 EC:220-239-6 Index:613-326-00-9

Acute Tox. 2, H330 Acute Tox. 3, H311 Acute Tox. 3, H301 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410, M-Chronic:1, M-Acute:10, EUH071

Specific Concentration Limits: $0.0015\% \le C < 100\%$: Skin Sens. 1A H317

Acute Toxicity Estimate: ATE - Oral: 100mg/kg bw ATE - Dermal: 300mg/kg bw ATE - Inhalation (Dust/mist): 0.05ma/l

The mixture contains >= 1% titanium dioxide CAS 13463-67-7 [in powder form containing >= 1 % of particles with aerodynamic diameter <= 10 µm]. Substance is classified as a category 2 inhalation carcinogenic (H351 inhalation) - Notes V,W,10. According to Regulation (EC) no. 1272/2008 (CLP), Annex II, part 2, section 2.12, the label on the packaging of liquid mixtures containing >= 1 % titanium dioxide particles with an aerodynamic diameter equal to or below 10 µm shall bear the following statement: EUH211: "Warning! Hazardous respirable droplets may be formed on vaporization. Do not breathe vapours or mist."

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Remove contaminated clothing immediatley and dispose off safely.

Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap.

In case of eyes contact:

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

In case of Ingestion:

Do not induce vomiting, get medical attention showing the SDS and label hazardous.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

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

The symptoms and effects are as expected from the hazards as shown in section 2.

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Product is not flammable.

Extinguishing media which must not be used for safety reasons:

None in particular.

5.2. Special hazards arising from the substance or mixture

Date 05/09/2023 **Production Name RSR 421** Page n. 3 of 12 Burning produces heavy smoke.

In the event of fire and/or explosion do not breathe fumes.

5.3. Advice for firefighters

Use suitable breathing apparatus.

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Remove persons to safety.

See protective measures under point 7 and 8.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

6.3. Methods and material for containment and cleaning up

Material suitable for collection: inert absorbent material (e.g. sand, vermiculite)

After the product has been recovered, rinse the area and materials involved with water.

Retain contaminated washing water and dispose it.

6.4. Reference to other sections

See also section 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

Advice on general occupational hygiene:

Contamined clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

7.2. Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a cool, well-ventilated place, away from heat.

Keep away from food, drink and feed.

Incompatible materials:

See chapter 10.5

Instructions as regards storage premises:

Adequately ventilated premises.

Protect from frost.

7.3. Specific end use(s)

Recommendation(s)

See chapter 1.2

Industrial sector specific solutions:

None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Community Occupational Exposure Limits (OEL)

Community Occupational Exposure Limits (OEL)							
	OEL Type	Country	Long Term mg/m3	Long Term ppm	Short Term mg/m3	Short Term ppm	Notes
titanium dioxide CAS: 13463-67-7	ACGIH		10				A4 - LRT irr
	VLEP	BELGIUM	10.000				
	VLEP	FRANCE	10.000				
	MAK	GERMANY	0.300		2.400		Respirable fraction, except ultrafine particles , Multiplied by the material density
	AGW	GERMANY	1.250				Respirable dust particles
	NDS	POLAND	10.000				Inhalable fraction

Date 05/09/2023 Production Name RSR 421 Page n. 4 of 12

	VLEP	ROMANIA	10.000	15.000	
	VLA	SPAIN	10.000		Inhalable fraction
	SUVA	SWITZERLAN	3.000		Respirable aerosol
		D			•
	WEL	U.K.	10.000		Inhalable aerosol
	WEL	U.K.	4.000		Respirable aerosol
	GVI	CROATIA	10.000		Inhalable fraction
	GVI	CROATIA	4.000		Respirable fraction
Silica crystalline, quartz (respirable fraction) CAS: 14808-60-7	ACGIH		0.025		(R), A2 - Pulm fibrosis, lung cancer
	EU		0.1		
	MAK	AUSTRIA	0.050		
	VLEP	FRANCE	0.100		Respirable aerosol
	ÁK	HUNGARY	0.150		Respirable aerosol
	NDS	POLAND	0.100		·
	VLA	SPAIN	0.050		
	SUVA	SWITZERLAN			Respirable aerosol
		D			•
	MAC	NETHERLAND S	0.075		Respirable dust
	GVI	CROATIA	0.100		
	MV	SLOVENIA	0.150		
	IPRV	LITHUANIA	0.100		
Silica crystalline, cristobalite (respirable fraction) CAS: 14464-46-1	ACGIH		0.025		(R), A2 - Pulm fibrosis, lung cancer
CAS. 14404-40-1					
	EU		0.100		
2-octyl-2H-isothiazol-3- one CAS: 26530-20-1	MAK	AUSTRIA	0.05	0.1	Inhalable aerosol
CAS: 26530-20-1					
CAS: 2053U-2U-1	AGW	GERMANY	0.050	0.100	Inhalable fraction, Skin
CAS: 20530-20-1	AGW MAK	GERMANY GERMANY	0.050 0.050	0.100 0.100	Inhalable fraction, Skin Inhalable fraction, Skin
CAS: 2053U-2U-1			0.050		
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) CAS: 55965-84-9	MAK	GERMANY SWITZERLAN	0.050	0.100	Inhalable fraction, Skin
reaction mass of 5- chloro-2-methyl-2H- isothiazol-3-one and 2- methyl-2H-isothiazol-3- one (3:1)	MAK SUVA	GERMANY SWITZERLAN D	0.050 0.050	0.100	Inhalable fraction, Skin
reaction mass of 5- chloro-2-methyl-2H- isothiazol-3-one and 2- methyl-2H-isothiazol-3- one (3:1)	MAK SUVA MAK	GERMANY SWITZERLAN D AUSTRIA	0.050 0.050 0.050	0.100 0.100	Inhalable fraction, Skin Inhalable aerosol
reaction mass of 5- chloro-2-methyl-2H- isothiazol-3-one and 2- methyl-2H-isothiazol-3- one (3:1)	MAK SUVA MAK MAK SUVA	GERMANY SWITZERLAN D AUSTRIA GERMANY SWITZERLAN	0.050 0.050 0.050	0.100 0.100 0.400	Inhalable fraction, Skin Inhalable aerosol Inhalable fraction
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) CAS: 55965-84-9	MAK SUVA MAK MAK SUVA	GERMANY SWITZERLAN D AUSTRIA GERMANY SWITZERLAN D AUSTRIA	0.050 0.050 0.050 0.200 0.200 0.050	0.100 0.100 0.400 0.400	Inhalable fraction, Skin Inhalable aerosol Inhalable fraction Inhalable fraction
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) CAS: 55965-84-9	MAK SUVA MAK MAK SUVA	GERMANY SWITZERLAN D AUSTRIA GERMANY SWITZERLAN D	0.050 0.050 0.050 0.200 0.200 0.050	0.100 0.100 0.400	Inhalable fraction, Skin Inhalable aerosol Inhalable fraction

8.2. Exposure controls

Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction.

Eye protection:

Eye glasses with side protection (EN 166).

Protection for skin:

Use suitable clothing that provides complete protection to the skin according to activity and exposure (EN 14605/EN 13982), e.g.

 Date
 05/09/2023
 Production Name
 RSR 421
 Page n. 5 of 12

overall, apron, safety shoes, suitable clothing.

Protection for hands:

There is no material or combination of materials for gloves that can guarantee unlimited resistance to any individual chemical or combination of chemicals.

For prolonged or repeated handling, use chemical resistant gloves.

Suitable materials for safety gloves (EN 374/EN 16523); NBR (Nitril rubber): thickness >= 0.4 mm; permeation time >= 480 min.; Butyl caoutchouc (butyl rubber): thickness >= 0.4 mm; permeation time >= 480 min.

The choice of suitable gloves does not only depend on the material, but also on other quality characteristics that vary from one manufacturer to another and on the manner and times according to which the mixture is used.

Respiratory protection:

If workers are exposed to concentrations above the exposure limit they must use appropriate, certified respirators.

Combination filtering device (EN 14387): mask with filter A-P2.

Environmental exposure controls:

See point 6.2

Hygienic and Technical measures

See section 7.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance: thick liquid

Color: various

Odour: Characteristic

Melting point / freezing point: N.D.

Initial boiling point and boiling range: N.D.

Flammability: N.A.

Upper/lower flammability or explosive limits: N.D.

Flash point: > 93°C

Auto-ignition temperature: N.D.

Decomposition temperature: N.D.

pH: >=8.00<=9.00 (Internal method)

Kinematic viscosity: N.A.

Relative density: $1,70 \div 1,90 \text{ kg/l}$ (Internal method)

Vapour density: N.D. Vapour pressure: N.D.

Solubility in water: miscible in all ratio Solubility in oil: No data available

Partition coefficient (n-octanol/water): N.A.

Particle characteristics:

Particle size: N.A. **9.2. Other information**

Conductivity: N.D.

Explosive properties: N.A. (Internal assessment) Oxidizing properties: N.A. (Internal assessment)

Evaporation rate: N.A.

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions

10.2. Chemical stability

Stable under normal conditions

10.3. Possibility of hazardous reactions

None.

10.4. Conditions to avoid

Keep away from heat sources.

10.5. Incompatible materials

None in particular.

10.6. Hazardous decomposition products

No hazardous decomposition products when stored and handled correctly.

See chapter 5.2

SECTION 11: Toxicological information

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

Date 05/09/2023 Production Name RSR 421 Page n. 6 of 12

Toxicological Information of the Preparation

a) acute toxicity Not classified

Based on available data, the classification criteria are not met

Based on available data, the classification criteria are not met

c) serious eye damage/irritation Not classified

Based on available data, the classification criteria are not met

d) respiratory or skin sensitisation The product is classified: Skin Sens. 1(H317)

e) germ cell mutagenicity Not classified

Based on available data, the classification criteria are not met

f) carcinogenicity Not classified

Based on available data, the classification criteria are not met

g) reproductive toxicity Not classified

Based on available data, the classification criteria are not met

h) STOT-single exposure Not classified

Based on available data, the classification criteria are not met

i) STOT-repeated exposure Not classified

Based on available data, the classification criteria are not met

j) aspiration hazard Not classified

Based on available data, the classification criteria are not met

Toxicological information on main components of the mixture:

titanium dioxide a) acute toxicity LD50 Oral Rat > 5000 mg/kg

LC50 Inhalation Dust Rat > 6.82 mg/l 4h

pyrithione zinc a) acute toxicity ATE - Oral: 221 mg/kg bw

ATE - Inhalation (Dust/mist): 0.14 mg/l

2-octyl-2H-isothiazol-3- a) acute toxicity ATE - Oral: 125 mg/kg bw

one

ATE - Dermal: 311 mg/kg bw

ATE - Inhalation (Dust/mist): 0.27 mg/l

reaction mass of 5- a) acute toxicity ATE - Oral: 100 mg/kg bw

chloro-2-methyl-2Hisothiazol-3-one and 2methyl-2H-isothiazol-3-

one (3:1)

ATE - Dermal: 50 mg/kg bw

ATE - Inhalation (Dust/mist): 0.05 mg/l

2-methylisothiazol-3(2H)- a) acute toxicity ATE - Oral : 100 mg/kg bw

one

ATE - Dermal: 300 mg/kg bw

ATE - Inhalation (Dust/mist): 0.05 mg/l

11.2. Information on other hazards

Endocrine disrupting properties:

No endocrine disruptor substances present in concentration >= 0.1%

SECTION 12: Ecological information

Adopt good working practices, so that the product is not released into the environment.

12.1. Toxicity

Eco-Toxicological Information:

Harmful to aquatic life with long lasting effects.

List of Eco-Toxicological properties of the product

Date 05/09/2023 Production Name RSR 421 Page n. 7 of 12

List of Eco-Toxicological properties of the components

Component	Ident. Numb.	Ecotox Data
titanium dioxide	CAS: 13463-67- 7 - EINECS: 236-675-5 - INDEX: 022- 006-00-2	a) Aquatic acute toxicity: LC50 Fish > 1000 mg/l 96h
		a) Aquatic acute toxicity: EC50 Daphnia > 1000 mg/l 48h
		a) Aquatic acute toxicity: EC50 Algae 61 mg/l 72h
pyrithione zinc	CAS: 13463-41- 7 - EINECS: 236-671-3 - INDEX: 613- 333-00-7	a) Aquatic acute toxicity: LC50 Fish 0.0104 mg/l 96h
		a) Aquatic acute toxicity: EC50 Daphnia 0.051 mg/l 48h
		a) Aquatic acute toxicity: EC50 Algae 0.0013 mg/l 72h
		a) Aquatic acute toxicity: EC50 Freshwater algae 0.051 mg/l 72h
		b) Aquatic chronic toxicity: NOEC Fish 0.00125 mg/l 28d
		b) Aquatic chronic toxicity: NOEC Daphnia 0.0022 mg/l 21d
		b) Aquatic chronic toxicity: NOEC Algae 0.00046 mg/l 96h
		b) Aquatic chronic toxicity: NOEC Freshwater algae 0.0149 mg/l 72h
Terbutryn	CAS: 886-50-0 - EINECS: 212- 950-5	a) Aquatic acute toxicity: LC50 Fish 1.9 mg/l 96h
		a) Aquatic acute toxicity: EC50 Algae 6.7 μg/l 72h
		a) Aquatic acute toxicity: EC50 Daphnia 6.4 mg/l 48h
		b) Aquatic chronic toxicity: NOEC Daphnia 0.05 mg/l 21d
		b) Aquatic chronic toxicity: NOEC Fish 0.073 mg/l 28d
		b) Aquatic chronic toxicity: NOEC Algae 0.0005 mg/l 72h
2-octyl-2H-isothiazol-3-one	CAS: 26530-20- 1 - EINECS: 247-761-7 - INDEX: 613- 112-00-5	a) Aquatic acute toxicity: LC50 Fish 0.036 mg/l 96h
		a) Aquatic acute toxicity: EC50 Daphnia 0.42 mg/l 48h
		a) Aquatic acute toxicity: EC50 Algae 0.084 mg/l 72h
		b) Aquatic chronic toxicity: NOEC Fish 0.022 mg/l 28d
		b) Aquatic chronic toxicity: NOEC Daphnia 0.002 mg/l 21d
		b) Aquatic chronic toxicity: NOEC Algae 0.004 mg/l 72h
reaction mass of 5-chloro-2- methyl-2H-isothiazol-3-one and 2- methyl-2H-isothiazol-3-one (3:1)	CAS: 55965-84- 9 - INDEX: 613- 167-00-5	a) Aquatic acute toxicity: LC50 Fish 0.22 mg/l 96h
		a) Aquatic acute toxicity: EC50 Daphnia 0.1 mg/l 48h
		a) Aquatic acute toxicity: EC50 Algae 0.0052 mg/l 48h
		a) Aquatic acute toxicity: EC50 Freshwater algae 0.048 mg/l 72h
		b) Aquatic chronic toxicity: NOEC Fish 0.098 mg/l - 28d
		b) Aquatic chronic toxicity: NOEC Daphnia 0.004 mg/l - 21d
		b) Aquatic chronic toxicity: NOEC Algae 0.00064 mg/l 48h
		b) Aquatic chronic toxicity: NOEC Freshwater algae 0.0012 mg/l 72h
2-methylisothiazol-3(2H)-one	CAS: 2682-20-4 - EINECS: 220- 239-6 - INDEX: 613-326-00-9	a) Aquatic acute toxicity: LC50 Fish 6 mg/l 96h
		a) Aquatic acute toxicity: EC50 Daphnia 1.68 mg/l 48h
		a) Aquatic acute toxicity: EC50 Algae 0.157 mg/l 72h
		b) Aquatic chronic toxicity: NOEC Fish 2.1 mg/l - 28d
		b) Aquatic chronic toxicity: NOEC Daphnia 0.55 mg/l - 21d

 Date
 05/09/2023
 Production Name
 RSR 421
 Page n. 8 of 12

12.2. Persistence and degradability

Component Persitence/Degradability:

pyrithione zinc Readily biodegradable
2-octyl-2H-isothiazol-3-one Non-readily biodegradable
reaction mass of 5-chloro-2- Non-readily biodegradable

methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)

2-methylisothiazol-3(2H)-one Readily biodegradable

12.3. Bioaccumulative potential

N.A.

12.4. Mobility in soil

N.A.

12.5. Results of PBT and vPvB assessment

On the basis of available data, the product does not contain any PBT/vPvB in percentage $\geq 0.1\%$.

12.6. Endocrine disrupting properties

No endocrine disruptor substances present in concentration >= 0.1%

12.7. Other adverse effects

N.A.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recover if possible. In so doing, comply with the local and national regulations currently in force.

Do not allow it to enter drains or watercourses.

Dispose of containers contaminated by the product in accordance with local or national legal provisions.

Once the product has expired, it must be disposed of in accordance with current legislation.

SECTION 14: Transport information

Not classified as dangerous in the meaning of transport regulations.

14.1. UN number or ID number

N/A

14.2. UN proper shipping name

IATA-Technical name: N/A
IMDG-Technical name: N/A

14.3. Transport hazard class(es)

ADR-Shipping Name: N/A

ADR-Class: N/A
IATA-Class: N/A
IMDG-Class: N/A

14.4. Packing group

ADR-Packing Group: N/A IATA-Packing group: N/A IMDG-Packing group: N/A

14.5. Environmental hazards

Marine pollutant: No

Environmental Pollutant: No

IMDG-EMS: N/A

14.6. Special precautions for user

Road and Rail (ADR-RID):

ADR-Label: N/A

 $\ensuremath{\mathsf{ADR}}$ - Hazard identification number: $\ensuremath{\mathsf{N/A}}$

ADR-Special Provisions: N/A

ADR-Transport category (Tunnel restriction code):

Air (IATA):

IATA-Passenger Aircraft: N/A IATA-Cargo Aircraft: N/A

Date 05/09/2023 Production Name RSR 421 Page n. 9 of 12

IATA-Label: N/A

IATA-Subsidiary hazards: N/A

IATA-Erg: N/A

IATA-Special Provisions: N/A

Sea (IMDG):

IMDG-Stowage Code: N/A
IMDG-Stowage Note: N/A
IMDG-Subsidiary hazards: N/A
IMDG-Special Provisions: N/A

14.7. Maritime transport in bulk according to IMO instruments

N.A.

SECTION 15: Regulatory information

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

Dir. 98/24/EC (Risks related to chemical agents at work)

Dir. 2000/39/EC (Occupational exposure limit values)

Directive 2010/75/EU

Regulation (EC) n. 1907/2006 (REACH)

Regulation (EC) n. 1272/2008 (CLP)

Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013

Regulation (EU) n. 2020/878

Regulation (EU) n. 286/2011 (ATP 2 CLP)

Regulation (EU) n. 618/2012 (ATP 3 CLP)

Regulation (EU) n. 487/2013 (ATP 4 CLP)

Regulation (EU) n. 944/2013 (ATP 5 CLP)

Regulation (EU) n. 605/2014 (ATP 6 CLP)

Regulation (EU) n. 2015/1221 (ATP 7 CLP)

Regulation (EU) n. 2016/918 (ATP 8 CLP)

Regulation (EU) n. 2016/1179 (ATP 9 CLP)

Regulation (EU) n. 2017/776 (ATP 10 CLP)

Regulation (EU) n. 2018/669 (ATP 11 CLP)

Regulation (EU) n. 2018/1480 (ATP 13 CLP)

Regulation (EU) n. 2019/521 (ATP 12 CLP)

Regulation (EU) n. 2020/217 (ATP 14 CLP)

Regulation (EU) n. 2020/1182 (ATP 15 CLP) Regulation (EU) n. 2021/643 (ATP 16 CLP)

Regulation (EU) n. 2021/849 (ATP 17 CLP)

Regulation (EU) n. 2022/692 (ATP 18 CLP)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product: 3

Restrictions related to the substances contained: 30, 40, 75

Provisions related to directive EU 2012/18 (Seveso III):

None

Regulation (EU) No 649/2012 (PIC regulation)

No substances listed

German Water Hazard Class.

Class 2: hazardous for water.

SVHC Substances:

On the basis of available data, the product does not contain any SVHC in percentage \geq 0.1%.

VOC content limit value (Directive 2004/42/EC) Category A/c, WB: max. VOC 40 g/l (January 2010); VOC in product <40 g/l Contains biocide with fungicide and algicide properties for dry films. Active substances: 2-octyl-2H-isothiazol-3-one (CAS 26530-20-1), pyrithione zinc (CAS 13463-41-7), terbutryn (CAS 886-50-0). In accordance with art. 58 of Regulation no. 528/2012, this product is defined as a "treated article" (not a biocidal product).

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture.

SECTION 16: Other information

Code Description

Date 05/09/2023 Production Name RSR 421 Page n. 10 of 12

H412	Harmful to aquatic life with long lasting effects.		
Code	Hazard class and hazard category	Description	
3.4.2/1	Skin Sens. 1	Skin Sensitisation, Category 1	
3.6/2	Carc. 2	Carcinogenicity, Category 2	
3.9/1	STOT RE 1	Specific target organ toxicity — repeated exposure, Category ${f 1}$	
4.1/C3	Aquatic Chronic 3	Chronic (long term) aquatic hazard, category 3	

Causes damage to organs through prolonged or repeated exposure.

Causes damage to organs through prolonged or repeated exposure if inhaled.

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
3.4.2/1	Calculation method
4.1/C3	Calculation method

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

H317

H351

H372

H372

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

Safety data sheets of raw materials suppliers.

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

Legend to abbreviations and acronyms used in the safety data sheet:

May cause an allergic skin reaction.

Suspected of causing cancer if inhaled.

ACGIH: American Conference of Governmental Industrial Hygienists

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

ATE: Acute Toxicity Estimate

ATEmix: Acute toxicity Estimate (Mixtures)

BEI: Biological Exposure Index

CAS: Chemical Abstracts Service (division of the American Chemical Society).

CAV: Poison Center CE: European Community

CLP: Classification, Labeling, Packaging. CMR: Carcinogenic, Mutagenic and Reprotoxic

COV: Volatile Organic Compound CSA: Chemical Safety Assessment CSR: Chemical Safety Report DNEL: Derived No Effect Level.

EC50: Half Maximal Effective Concentration

ECHA: European Chemicals Agency

EINECS: European Inventory of Existing Commercial Chemical Substances.

ES: Exposure Scenario

 $GefStoffVO:\ Ordinance\ on\ Hazardous\ Substances,\ Germany.$

GHS: Globally Harmonized System of Classification and Labeling of Chemicals.

IARC: International Agency for Research on Cancer

IATA: International Air Transport Association. IC50: half maximal inhibitory concentration

IMDG: International Maritime Code for Dangerous Goods. LC50: Lethal concentration, for 50 percent of test population.

LD50: Lethal dose, for 50 percent of test population.

LDLo: Leathal Dose Low N.A.: Not Applicable N/A: Not Applicable

N/D: Not defined/ Not available

N.D.: Not available

NIOSH: National Institute for Occupational Safety and Health

NOAEL: No Observed Adverse Effect Level

Date 05/09/2023 Production Name RSR 421 Page n. 11 of 12

OSHA: Occupational Safety and Health Administration.

PBT: Persistent, Bioaccumulative and Toxic

PGK: Packaging Instruction

PNEC: Predicted No Effect Concentration.

PSG: Passengers

RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.

STEL: Short Term Exposure limit. STOT: Specific Target Organ Toxicity.

TLV: Threshold Limiting Value.

TLV-TWA: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).

vPvB: Very Persistent, Very Bioaccumulative.

WGK: German Water Hazard Class.

Paragraphs modified from the previous revision:

- SECTION 1: Identification of the substance/mixture and of the company/undertaking
- SECTION 3: Composition/information on ingredients
- SECTION 8: Exposure controls/personal protection
- SECTION 11: Toxicological information
- SECTION 12: Ecological information
- SECTION 13: Disposal considerations
- SECTION 14: Transport informationSECTION 15: Regulatory information

Date 05/09/2023 Production Name RSR 421 Page n. 12 of 12