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

1.1. Product identifier

Mixture identification:

Trade name: SILANCOLOR PITTURA ZERO

Trade code: 906XD9990

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

Recommended use: Water dispersion synthetic resin based paint

Uses advised against: Data not available.

1.3. Details of the supplier of the safety data sheet

Company: MAPEI S.p.A. - Via Cafiero, 22 - 20158 Milano

Tel. +(39)02376731 (office hours) - Fax: +39-02-37673.214 - www.mapei.it

Responsable: sicurezza@mapei.it

1.4. Emergency telephone number

Centro antiveleni, Azienda ospedaliera "Antonio Cardarelli", III Servizio di anestesia e rianimazione, via Antonio Cardarelli 9, Napoli - Tel. 081 5453333

Centro antiveleni, Azienda ospedaliera universitaria Careggi, U.O. Tossicologia medica, via Largo Brambilla 3, Firenze - Tel. 055 7947819

Centro antiveleni, Centro nazionale d'informazione tossicologica, IRCCS Fondazione Salvatore Maugeri Clinica del lavoro e della riabilitazione, via Salvatore Maugeri 10, Pavia - Tel. 0382 24444

Centro antiveleni, Azienda ospedaliera Niguarda Ca' Granda, piazza Ospedale Maggiore 3, Milano - Tel. 02 66101029

Centro antiveleni, Azienda ospedaliera "Papa Giovanni XXIII", Tossicologia clinica, Dipartimento di farmacia clinica e farmacologia, piazza OMS 1, Bergamo - Tel. 800 883300

Centro antiveleni Policlinico "Umberto I", PRGM tossicologia d'urgenza, viale del Policlinico 155, Roma - Tel. 06 49978000

Centro antiveleni del Policlinico "Agostino Gemelli", Servizio di tossicologia clinica, largo Agostino Gemelli 8, Roma - Tel. 06 3054343

Centro antiveleni, Azienda ospedaliera universitaria Riuniti, viale Luigi Pinto 1, Foggia - Tel. 800 183459

Centro antiveleni, Ospedale pediatrico Bambino Gesù, Dipartimento emergenza e accettazione DEA, piazza Sant'Onofrio 4, Roma - Tel. 06 68593726

Centro antiveleni dell'Azienda ospedaliera universitaria integrata (AOUI) di Verona sede di Borgo Trento, piazzale Aristide Stefani, 1 - 37126 Verona - Tel. 800 011858

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

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

Hazard statements

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P273 Avoid release to the environment.

P501 Dispose of contents/container in accordance with applicable regulations.

Special Provisions:

EUH208 Contains 1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one. May produce an allergic reaction.

EUH208 Contains reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H - isothiazol-3-one [EC no. 220-239-6] (3:1). May produce an allergic reaction.

EUH208 Contains 4,5-dichloro-2-octyl-2H-isothiazol-3-one. May produce an allergic reaction.

EUH208 Contains 2-octyl-2H-isothiazol-3-one. May produce an allergic reaction.

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

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%

Other Hazards: No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

Not Relevant

3.2. Mixtures

Mixture identification: SILANCOLOR PITTURA ZERO

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

Qty	Name	Ident. Numb.	Classification	Registration Number
≥0.25 - <0.49 %	Alcohols, C16-18 and C18-unsatd., ethoxylated	CAS:68920-66-1 EC:500-236-9	Skin Irrit. 2, H315; Aquatic Acute 1, H400; Aquatic Chronic 3, H412, M-Acute:1	
≥0.05 - <0.1 %	free crystalline silica (Ø <10 µ)	CAS:14808-60-7 EC:238-878-4	STOT RE 1, H372	
≥0.025 - <0.05 %	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one	CAS:2634-33-5 EC:220-120-9 Index:613-088-00-6	Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Acute 1, H400 Acute Tox. 4, H302 Skin Sens. 1, H317 Aquatic Chronic 2, H411 Specific Concentration Limits: C ≥ 0.05%: Skin Sens. 1 H317	
≥0.01 - <0.016 %	terbutryn	CAS:886-50-0 EC:212-950-5	Aquatic Acute 1, H400 Aquatic Chronic 1, H410 Acute Tox. 4, H302 Skin Sens. 1B, H317, M-Chronic:100, M-Acute:100 Specific Concentration Limits: C ≥ 3%: Skin Sens. 1B H317	
<0.0015 %	reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1)	CAS:55965-84-9 EC:611-341-5 Index:613-167-00-5	Aquatic Acute 1, H400 Aquatic Chronic 1, H410 Acute Tox. 3, H301 Skin Corr. 1C, H314 Skin Sens. 1A, H317 Acute Tox. 2, H310 Acute Tox. 2, H330 Eye Dam. 1, H318, M-Chronic:100, M-Acute:100, EUH071 Specific Concentration Limits: C ≥ 0.6%: Skin Corr. 1C H314 0.06% ≤ C < 0.6%: Skin Irrit. 2 H315 C ≥ 0.6%: Eye Dam. 1 H318 0.06% ≤ C < 0.6%: Eye Irrit. 2 H319 C ≥ 0.0015%: Skin Sens. 1A H317	
<0.0015 %	4,5-dichloro-2-octyl-2H-isothiazol-3-one	CAS:64359-81-5 EC:264-843-8 Index:613-335-00-8	Acute Tox. 2, H330 Acute Tox. 4, H302 Skin Corr. 1, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 Corrosive to the respiratory tract., M-Chronic:100, M-Acute:100 Specific Concentration Limits: 0.025% ≤ C < 5%: Skin Irrit. 2 H315 0.025% ≤ C < 3%: Eye Irrit. 2 H319 C ≥ 0.0015%: Skin Sens. 1A H317 Acute Toxicity Estimate: ATE - Oral: 567mg/kg bw	

<0.0015 % 2-octyl-2H-isothiazol-3-one	CAS:26530-20-1 EC:247-761-7 Index:613-112-00-5	Acute Tox. 2, H330 Acute Tox. 3, H311 Acute Tox. 3, H301 Skin Corr. 1, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410, 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	
< 0.00015 % formaldehyde	CAS:50-00-0 EC:200-001-8 Index:605-001-00-5	Acute Tox. 3, H311 Acute Tox. 3, H331 Acute Tox. 3, H301 Skin Corr. 1B, H314 Skin Sens. 1, H317 Muta. 2, H341 Carc. 1B, H350 Specific Concentration Limits: 0.2% ≤ C < 100%: Skin Sens. 1 H317 5% ≤ C < 25%: Skin Irrit. 2 H315 5% ≤ C < 25%: Eye Irrit. 2 H319 5% ≤ C < 100%: STOT SE 3 H335 25% ≤ C < 100%: Skin Corr. 1B H314	01-2119488953-20-XXXX

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Wash with plenty of water and soap.

In case of eyes contact:

Wash immediately with water.

In case of Ingestion:

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

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

Not available

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

Treatment:

Not available

(see paragraph 4.1)

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Water.

Carbon dioxide (CO2).

Extinguishing media which must not be used for safety reasons:

None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

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

For non emergency personnel:

Wear personal protection equipment.

Remove persons to safety.

See protective measures under point 7 and 8.

For emergency responders:

Wear personal protection equipment.

6.2. Environmental precautions

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

Limit leakages with earth or sand.

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

Suitable material for taking up: absorbing material, organic, sand

Wash with plenty of 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.

Contaminated clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

Advice on general occupational hygiene:

7.2. Conditions for safe storage, including any incompatibilities

Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

7.3. Specific end use(s)

Recommendation(s)

None in particular

Industrial sector specific solutions:

None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Community Occupational Exposure Limits (OEL)

	OEL Type	Country	Occupational Exposure Limit
free crystalline silica (Ø <10 µ) CAS: 14808-60-7	ACGIH		Long Term: 0.025 mg/m3 A2 - Suspected Human Carcinogen;lung cancer;pulmonary fibrosis
	National	ARGENTINA	Long Term: 0.05 mg/m3
	National	AUSTRALIA	Long Term: 0.1 mg/m3
	National	AUSTRIA	Long Term: 0.15 mg/m3 A*
	National	BELGIUM	Long Term: 0.1 mg/m3
	National	BULGARIA	Long Term: 0.07 mg/m3
	National	CROATIA	Long Term: 0.1 mg/m3
	National	CZECH REPUBLIC	Long Term: 0.1 mg/m3
	National	DENMARK	Long Term: 0.1 mg/m3; Short Term: 0.2 mg/m3 Respirabel fraktion, respirable fraction E: Stoffet har en EU-grænseværdi. K: Stoffet anses for at kunne være kræftfremkaldende.
	National	DENMARK	Long Term: 0.3 mg/m3; Short Term: 0.6 mg/m3 Total dust

	National	ESTONIA	Long Term: 0.1 mg/m3
	National	FINLAND	Long Term: 0.05 mg/m3 Respirabel fraktion. Respirable fraction
	National	FRANCE	Long Term: 0.1 mg/m3
	National	HUNGARY	Long Term: 0.15 mg/m3
	National	ITALY	Long Term: 0.1 mg/m3
	National	LITHUANIA	Long Term: 0.1 mg/m3
	Malaysia OEL	MALAYSIA	Long Term: 0.1 mg/m3 0.1 mg/m3 TWA (respirable dust)
	NDS	NETHERLANDS	Long Term: 0.075 mg/m3
	National	NORWAY	Long Term: 0.3 mg/m3 Totalstøv (total dust); K: Kjemikalier som skal betraktes som kreftfremkallende.
	National	NORWAY	Long Term: 0.05 mg/m3 Respirabelt støv (respirable dust); K: Kjemikalier som skal betraktes som kreftfremkallende. G: EU har fastsatt en bindende grenseverdi og/eller anmerkning av stoffet.
	ACGIH		Long Term: 0.025 mg/m3 (R), A2 - Pulm fibrosis, lung cancer
	EU		Long Term: 0.025 mg/m3 A2 (R) - Pulm fibrosis, lung cancer
	NDS	POLAND	Long Term: 0.1 mg/m3
	National	PORTUGAL	Long Term: 0.025 mg/m3
	National	ROMANIA	Long Term: 0.1 mg/m3
	National	SLOVAKIA	Long Term: 0.1 mg/m3; Short Term: 0.5 mg/m3
	National	SLOVENIA	Long Term: 0.1 mg/m3
	National	SPAIN	Long Term: 0.05 mg/m3
	National	SWEDEN	Long Term: 0.1 mg/m3 Respirabel fraktion. Respirable fraction C: Ämnet är cancerframkallande. M: Medicinska kontroller.
2-octyl-2H-isothiazol-3-one CAS: 26530-20-1	DFG	GERMANY	Short Term: Ceiling - 54 mg/m3 - 10 ppm
	National	GERMANY	Long Term: 0.05 mg/m3
	CHE	SWITZERLAND	Short Term: 0.1 mg/m3
	National	SLOVENIA	Long Term: 0.05 mg/m3; Short Term: 0.05 mg/m3
	DFG	GERMANY	Short Term: Ceiling - 0.1 mg/m3
	National	SLOVENIA	Long Term: 0.05 mg/m3; Short Term: 0.1 mg/m3
formaldehyde CAS: 50-00-0	ACGIH		Short Term: Ceiling - 0.3 ppm DSEN, RSEN, A2 - URT and eye irr
	DFG	GERMANY	Short Term: Ceiling - 0.74 mg/m3 - 0.6 ppm
	ACGIH		Long Term: 0.1 ppm; Short Term: 0.3 ppm A1 - Confirmed Human Carcinogen;eye and upper respiratory tract irritation;upper respiratory tract cancer;dermal sensitizer; respiratory sensitizer
	National	SWEDEN	Long Term: 0.37 mg/m3 - 0.3 ppm
	National	FRANCE	Long Term: 0.5 ppm; Short Term: 1 ppm
	National	SPAIN	Long Term: 0.37 mg/m3 - 0.3 ppm; Short Term: 0.74 mg/m3 - 0.6 ppm
	National	GREECE	Long Term: 2.5 mg/m3 - 2 ppm; Short Term: 2.5 mg/m3 - 2 ppm
	National	DENMARK	Short Term: Ceiling - 0.4 mg/m3 - 0.3 ppm
	National	FINLAND	Long Term: 0.37 mg/m3 - 0.3 ppm
	National	FINLAND	Short Term: Ceiling - 1.2 mg/m3 - 1 ppm
	National	GERMANY	Long Term: 0.37 mg/m3 - 0.3 ppm
	National	NORWAY	Long Term: 0.6 mg/m3 - 0.5 ppm
	National	NORWAY	Short Term: Ceiling - 1.2 mg/m3 - 1 ppm

NDS	POLAND	Long Term: 0.37 mg/m3
NDSCh	POLAND	Short Term: 0.74 mg/m3
CHE	SWITZERLAND	Short Term: 0.74 mg/m3 - 0.6 ppm
NDS	NETHERLANDS	Long Term: 0.15 mg/m3; Short Term: 0.5 mg/m3
National	CZECH REPUBLIC	Long Term: 0.5 mg/m3
National	HUNGARY	Long Term: 0.6 mg/m3; Short Term: 0.6 mg/m3
Malaysia OEL	MALAYSIA	Short Term: Ceiling - 0.37 mg/m3 - 0.3 ppm
National	PORTUGAL	Short Term: Ceiling - 0.3 ppm
National	ESTONIA	Long Term: 0.6 mg/m3 - 0.5 ppm; Short Term: 1.2 mg/m3 - 1 ppm
National	LATVIA	Long Term: 0.5 mg/m3
National	CZECH REPUBLIC	Short Term: Ceiling - 1 mg/m3
National	SLOVAKIA	Short Term: Ceiling - 0.74 mg/m3
National	SLOVAKIA	Long Term: 0.37 mg/m3 - 0.3 ppm
National	SLOVENIA	Long Term: 0.62 mg/m3 - 0.5 ppm; Short Term: 0.62 mg/m3 - 0.5 ppm
National	UNITED KINGDOM	Long Term: 2.5 mg/m3 - 2 ppm; Short Term: 2.5 mg/m3 - 2 ppm
National	BULGARIA	Long Term: 1 mg/m3; Short Term: 2 mg/m3
National	ROMANIA	Long Term: 1.2 mg/m3 - 1 ppm; Short Term: 3 mg/m3 - 2 ppm
National	LITHUANIA	Long Term: 0.6 mg/m3 - 0.5 ppm
National	LITHUANIA	Short Term: Ceiling - 1.2 mg/m3 - 1 ppm
National	CROATIA	Long Term: 2.5 mg/m3 - 2 ppm; Short Term: 2.5 mg/m3 - 2 ppm
EU		Long Term: 0.37 mg/m3 - 0.3 ppm Behaviour Binding

Predicted No Effect Concentration (PNEC) values

formaldehyde CAS: 50-00-0	Exposure Route: Fresh Water; PNEC Limit: 0.47 mg/l
	Exposure Route: Marine water; PNEC Limit: 0.47 mg/l
	Exposure Route: Intermittent release; PNEC Limit: 4.7 mg/l
	Exposure Route: Microorganisms in sewage treatments; PNEC Limit: 0.19 mg/l
	Exposure Route: Freshwater sediments; PNEC Limit: 2.44 mg/kg
	Exposure Route: Marine water sediments; PNEC Limit: 2.44 mg/kg
	Exposure Route: Soil; PNEC Limit: 0.21 mg/kg

Derived No Effect Level (DNEL) values

formaldehyde CAS: 50-00-0	Exposure Route: Human Inhalation; Exposure Frequency: Short Term, local effects Worker Industry: 1 mg/m3
	Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects Worker Industry: 240 mg/kg; Consumer: 102 mg/kg
	Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects Worker Industry: 9 mg/m3; Consumer: 3.2 mg/m3
	Exposure Route: Human Dermal; Exposure Frequency: Long Term, local effects Worker Industry: 0.037 mg/cm2; Consumer: 0.012 mg/cm2
	Exposure Route: Human Inhalation; Exposure Frequency: Long Term, local effects Worker Industry: 0.5 mg/m3; Consumer: 0.1 mg/m3
	Exposure Route: Human Oral; Exposure Frequency: Long Term, systemic effects Consumer: 4.1 mg/kg

8.2. Exposure controls

Eye protection:

Not needed for normal use. Anyway, operate according good working practices.

Protection for skin:

No special precaution must be adopted for normal use.

Protection for hands:

Suitable materials for safety gloves; EN ISO 374:

Polychloroprene - CR: thickness >=0,5mm; breakthrough time >=480min.

Nitrile rubber - NBR: thickness >=0,35mm; breakthrough time >=480min.

Butyl rubber - IIR: thickness >=0,5mm; breakthrough time >=480min.

Fluorinated rubber - FKM: thickness >=0,4mm; breakthrough time >=480min.

Neoprene gloves are suggested (0,5 mm) not recommended gloves: not waterproof gloves

Respiratory protection:

Personal Protective Equipment should comply with relevant CE standards (as EN ISO 374 for gloves and EN ISO 166 for goggles), correctly maintained and stored. Consult the supplier to check the suitability of equipment against specific chemicals and for user information.

Respiratory protection must be used where exposure levels exceed workplace exposure limits. Refer to appropriate EN standards, like EN 136, 140, 143, 149, 14387 for information on selection and use of appropriate respiratory protection equipment.

Hygienic and Technical measures

Not available

Appropriate engineering controls:

Not available

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Liquid

Appearance: paste

Color: various

Odour: Characteristic

Odour threshold: Not available

Melting point / freezing point: Not available

Initial boiling point and boiling range: Not available

Flammability: N.A.

Lower and upper explosion limit: Not available

Flash point: Not available

Auto-ignition temperature: Not available

Decomposition temperature: Not available

pH: 8.50

Viscosity: 28,000.00 mPA-s

Kinematic viscosity: Not available

Solubility in water: dispersible

Solubility in oil: Not available

Partition coefficient (n-octanol/water): Not available

Vapour pressure: Not available

Relative density: 1.44 g/cm3

Vapour density: Not available

Particle characteristics:

Particle size: Not available

9.2. Other information

Miscibility: Not available

Conductivity: Not available

No other relevant information

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

Stable under normal conditions.

10.5. Incompatible materials

None in particular.

10.6. Hazardous decomposition products

None.

SECTION 11: Toxicological information

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

Toxicological Information of the Preparation

a) acute toxicity	Not classified
	Based on available data, the classification criteria are not met
b) skin corrosion/irritation	Not classified
	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	Not classified
	Based on available data, the classification criteria are not met
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:

free crystalline silica (Ø <10 µ)	a) acute toxicity	LD50 Oral Rat = 500 mg/kg
1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one	a) acute toxicity	LD50 Oral Rat = 670 mg/kg
terbutryn	a) acute toxicity	LD50 Skin Rabbit > 10200 mg/kg LC50 Inhalation Rat > 8 g/m3 4h LD50 Oral Rat = 2045 mg/kg LD50 Skin Rabbit > 10200 mg/kg
reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1)	a) acute toxicity	LC50 Inhalation Rat = 2.36 mg/l 4h LD50 Skin Rabbit = 660 mg/kg LD50 Oral Rat = 53 mg/kg
4,5-dichloro-2-octyl-2H-isothiazol-3-one	a) acute toxicity	ATE - Oral : 567 mg/kg bw LC50 Inhalation Dust Rat = 0.16 mg/l LD50 Oral Rat = 567 mg/kg
2-octyl-2H-isothiazol-3-one	a) acute toxicity	ATE - Oral : 125 mg/kg bw ATE - Dermal : 311 mg/kg bw LD50 Oral Rat = 318 mg/kg

		LD50 Skin Rabbit = 311 mg/kg
		LC50 Inhalation Dust Rat = 0.58 mg/l 4h
formaldehyde	a) acute toxicity	LD50 Oral Rat = 700 mg/kg
		LC50 Inhalation Rat = 0.578 mg/l
		LD50 Skin Rabbit = 270 mg/kg
		LD50 Skin Rabbit = 270 mg/kg
		LC50 Inhalation Rat = 0.578 mg/l 4h
		LD50 Oral Rat = 100 mg/kg

11.2. Information on other hazards

Endocrine disrupting properties:

No endocrine disruptor substances present in concentration >= 0.1%

SECTION 12: Ecological information

12.1. Toxicity

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

Eco-Toxicological Information:

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

List of Eco-Toxicological properties of the product

The product is classified: Aquatic Chronic 3(H412)

List of Eco-Toxicological properties of the components

Component	Ident. Numb.	Ecotox Data
1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one	CAS: 2634-33-5 - EINECS: 220-120-9 - INDEX: 613-088-00-6	a) Aquatic acute toxicity : LC50 Fish = 2.15 mg/L
		b) Aquatic chronic toxicity : NOEC Algae = 0.0403 mg/L 72h
		b) Aquatic chronic toxicity : EC50 Algae = 0.11 mg/L 72h
		b) Aquatic chronic toxicity : EC10 Algae = 0.04 mg/L 72h
		b) Aquatic chronic toxicity : EC50 Daphnia = 3.27 mg/L 48h
		NOEC Daphnia = 1.2 mg/L 21d
terbutryn	CAS: 886-50-0 - EINECS: 212-950-5	a) Aquatic acute toxicity : EC50 Daphnia = 6.4 mg/L 48
		a) Aquatic acute toxicity : EC50 Algae = 0.0067 mg/L 72
		a) Aquatic acute toxicity : LC50 Fish = 1.9 mg/L 96
		b) Aquatic chronic toxicity : NOEC Daphnia = 0.05 mg/L - 21d
		b) Aquatic chronic toxicity : NOEC Fish = 0.073 mg/L - 28d
reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H - isothiazol-3-one [EC no. 220-239-6] (3:1)	CAS: 55965-84-9 - EINECS: 611-341-5 - INDEX: 613-167-00-5	a) Aquatic acute toxicity : EC50 Daphnia = 0.12 mg/L 48
		a) Aquatic acute toxicity : LC50 Fish = 0.22 mg/L 96
		a) Aquatic acute toxicity : EC50 Algae = 0.048 mg/L 72
		b) Aquatic chronic toxicity : NOEC Algae = 0.0012 mg/L 72
		b) Aquatic chronic toxicity : NOEC Fish = 0.098 mg/L - 28 d
		b) Aquatic chronic toxicity : NOEC Daphnia = 0.004 mg/L - 21 d
4,5-dichloro-2-octyl-2H-isothiazol-3-one	CAS: 64359-81-5 - EINECS: 264-843-8 - INDEX: 613-335-00-8	a) Aquatic acute toxicity : EC50 Daphnia = mg/L 48
		a) Aquatic acute toxicity : EC50 Algae = mg/L 72
		a) Aquatic acute toxicity : LC50 Fish = mg/L 96
		b) Aquatic chronic toxicity : NOEC Daphnia = mg/L

		b) Aquatic chronic toxicity : NOEC Fish = mg/L
2-octyl-2H-isothiazol-3-one	CAS: 26530-20-1 - EINECS: 247-761-7 - INDEX: 613-112-00-5	a) Aquatic acute toxicity : EC50 Daphnia = 0.42 mg/L 48
		a) Aquatic acute toxicity : EC50 Algae = 0.084 mg/L 72
		a) Aquatic acute toxicity : LC50 Fish = 0.036 mg/L 96
		a) Aquatic acute toxicity : LC50 Fish = 0.18 mg/L 96
		b) Aquatic chronic toxicity : NOEC Daphnia = 0.002 mg/L - 21 d
		b) Aquatic chronic toxicity : NOEC Fish = 0.022 mg/L - 28 d
		b) Aquatic chronic toxicity : NOEC Algae = 0.004 mg/L 72
formaldehyde	CAS: 50-00-0 - EINECS: 200-001-8 - INDEX: 605-001-00-5	a) Aquatic acute toxicity : LC50 Fish = 41 mg/L 96
		a) Aquatic acute toxicity : EC50 Daphnia = 42 mg/L 24
		a) Aquatic acute toxicity : LC50 Fish Pimephales promelas 22.6 mg/L 96h EPA
		a) Aquatic acute toxicity : LC50 Fish Lepomis macrochirus = 1510 µg/L 96h EPA
		a) Aquatic acute toxicity : LC50 Fish Brachydanio rerio = 41 mg/L 96h IUCLID
		a) Aquatic acute toxicity : LC50 Fish Oncorhynchus mykiss 0.032 mL/L 96h EPA
		a) Aquatic acute toxicity : LC50 Fish Oncorhynchus mykiss 100 mg/L 96h EPA
		a) Aquatic acute toxicity : LC50 Fish Pimephales promelas 23.2 mg/L 96h EPA
		a) Aquatic acute toxicity : LC50 Daphnia Daphnia magna = 2 mg/L 48h IUCLID
		a) Aquatic acute toxicity : EC50 Daphnia Daphnia magna 11.3 mg/L 48h EPA

12.2. Persistence and degradability

N.A.

12.3. Bioaccumulative potential

N.A.

12.4. Mobility in soil

N.A.

12.5. Results of PBT and vPvB assessment

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

12.6. Endocrine disrupting properties

No endocrine disruptor substances present in concentration >= 0.1%

12.7. Other adverse effects

Not available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

The generation of waste should be avoided or minimized wherever possible. Recover if possible.

A waste code (EWC) according to European List of Waste (LoW) cannot be specified, due to dependence on the usage. Contact and send to an authorized waste disposal service.

Methods of disposal:

Disposal of this product, solutions, packaging and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Dispose of surplus and nonrecyclable products via a licensed waste disposal contractor.

Do not dispose of waste into sewers.

Hazardous waste: Yes

Disposal considerations:

Do not allow to enter drains or watercourses.

Dispose of product according to all federal, state and local applicable regulations.

If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned.

Dispose of containers contaminated by the product in accordance with local or national legal provisions. For further information, contact your local waste authority.

Special precautions:

This material and its container must be disposed of in a safe way. Care should be taken when handling untreated empty containers.

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Empty containers or liners may retain some product residues. Do not re-use empty containers.

SECTION 14: Transport information

Not classified as dangerous in the meaning of transport regulations.

14.1. UN number or ID number

Not Applicable

14.2. UN proper shipping name

Not Applicable

14.3. Transport hazard class(es)

Not Applicable

14.4. Packing group

Not Applicable

14.5. Environmental hazards

Not Applicable

14.6. Special precautions for user

Not Applicable

Road and Rail (ADR-RID):

Not Applicable

Air (IATA):

Not Applicable

Sea (IMDG):

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

VOC (2004/42/EC) : 28 g/l

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

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

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. 2015/1221 (ATP 7 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)

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

None

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: 28, 40, 72, 75

SVHC Substances:

SVHC substances not present in a concentration ≥ 0.1% (w/w)

National regulations

MAL-kode: 00-1 (1993)

German Water Hazard Class.

Class 1: slightly hazardous for water.

15.2. Chemical safety assessment

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

SECTION 16: Other information

Code	Description
H301	Toxic if swallowed.
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.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H335	May cause respiratory irritation.
H341	Suspected of causing genetic defects.
H350	May cause cancer.
H372	Causes damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H412	Harmful to aquatic life with long lasting effects.

Code	Hazard class and hazard category	Description
3.1/3/Dermal	Acute Tox. 3	Acute toxicity (dermal), Category 3
3.1/3/Inhal	Acute Tox. 3	Acute toxicity (inhalation), Category 3
3.1/3/Oral	Acute Tox. 3	Acute toxicity (oral), Category 3
3.2/1B	Skin Corr. 1B	Skin corrosion, Category 1B
3.2/2	Skin Irrit. 2	Skin irritation, Category 2
3.3/2	Eye Irrit. 2	Eye irritation, Category 2
3.4.2/1	Skin Sens. 1	Skin Sensitisation, Category 1
3.5/2	Muta. 2	Germ cell mutagenicity, Category 2
3.6/1B	Carc. 1B	Carcinogenicity, Category 1B
3.8/3	STOT SE 3	Specific target organ toxicity — single exposure, Category 3
3.9/1	STOT RE 1	Specific target organ toxicity — repeated exposure, Category 1
4.1/A1	Aquatic Acute 1	Acute aquatic hazard, category 1
4.1/C3	Aquatic Chronic 3	Chronic (long term) aquatic hazard, category 3

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
Aquatic Chronic 3, H412	Calculation method

If appropriate, specific provisions in relation to possible training for workers are mentioned in section 2. Any training related to safety in the workplace must in any case refer to a risk assessment that must be carried out by a company safety officer taking into account the specific operating and environmental conditions in which the products are used.

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

Main bibliographic sources:

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

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 SDS cancels and replaces any preceding release.

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

ACGIH: American Conference of Governmental Industrial Hygienists

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

AND: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

ATE: Acute Toxicity Estimate

ATEmix: Acute toxicity Estimate (Mixtures)

BCF: Biological Concentration Factor

BEI: Biological Exposure Index

BOD: Biochemical Oxygen Demand

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
COD: Chemical Oxygen Demand
COV: Volatile Organic Compound
CSA: Chemical Safety Assessment
CSR: Chemical Safety Report
DMEL: Derived Minimal Effect Level
DNEL: Derived No Effect Level.
DPD: Dangerous Preparations Directive
DSD: Dangerous Substances Directive
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.
IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
IC50: half maximal inhibitory concentration
ICAO: International Civil Aviation Organization.
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG: International Maritime Code for Dangerous Goods.
INCI: International Nomenclature of Cosmetic Ingredients.
IRCCS: Scientific Institute for Research, Hospitalization and Health Care
KAFH: KAFH
KSt: Explosion coefficient.
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
NA: Not available
NIOSH: National Institute for Occupational Safety and Health
NOAEL: No Observed Adverse Effect Level
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.
TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).
vPvB: Very Persistent, Very Bioaccumulative.
WGK: German Water Hazard Class.