

## Safety Data Sheet

### C 285 BETON-E

Safety Data Sheet dated 01/09/2023 version 3



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

### 1.1. Product identifier

Mixture identification:

Trade name: C 285 BETON-E

Trade code: COLCBE

UFI: JF13-P0T1-400M-934D

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

Recommended use: Protective elastomer finish for concrete

### 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

Responsible: 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 applicable regulations.

#### 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

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

reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)

2-methylisothiazol-3(2H)-one

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), pyrrithione 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: C 285 BETON-E

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

Qty	Name	Ident. Numb.	Classification	Registration Number:
≥10 - <20 %	titanium dioxide	CAS:13463-67-7 EC:236-675-5 Index:022-006-00-2	Carc. 2, H351	01-2119489379-17-xxxx
≥0.1 - <0.3 %	Silica crystalline, quartz (respirable fraction)	CAS:14808-60-7 EC:238-878-4	STOT RE 1, H372	Exempted
≥0.1 - <0.3 %	Silica crystalline, cristobalite (respirable fraction)	CAS:14464-46-1	STOT RE 1, H372	
≥0.025 - <0.05 %	2-(2-butoxyethoxy)ethanol	CAS:112-34-5 EC:203-961-6 Index:603-096-00-8	Eye Irrit. 2, H319	01-2119475104-44-xxxx
≥0.005 - <0.025 %	1,2-benzisothiazol-3(2H)-one	CAS:2634-33-5 EC:220-120-9 Index:613-088-00-6	Acute Tox. 2, H330 Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410, M:1	Specific Concentration Limits: 0.05% ≤ C < 100%: Skin Sens. 1 H317  Acute Toxicity Estimate: ATE - Oral: 500mg/kg bw ATE - Inhalation (Dust/mist): 0.05mg/l
≥0.005 - <0.025 %	pyrrithione zinc	CAS:13463-41-7 EC:236-671-3 Index:613-333-00-7	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 ≥ 3%: Skin Sens. 1B H317

≥0.0015 - 2-octyl-2H-isothiazol-3-one <0.005 %	CAS:26530-20-1 EC:247-761-7 Index:613-112-00-5	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		

  

≥0.00015 - reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) <0.0015 %	CAS:55965-84-9 Index:613-167-00-5	Acute Tox. 2, H330 Acute Tox. 2, H310 Acute Tox. 3, H301 Skin 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, EUH071
Specific Concentration Limits: 0.6% ≤ C < 100%: Skin Corr. 1C H314 0.06% ≤ C < 0.6%: Skin Irrit. 2 H315 0.6% ≤ C < 100%: Eye Dam. 1 H318 0.06% ≤ C < 0.6%: Eye Irrit. 2 H319 0.0015% ≤ 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% ≤ C < 100%: Skin Sens. 1A H317		
Acute Toxicity Estimate: ATE - Oral: 100mg/kg bw ATE - Dermal: 300mg/kg bw ATE - Inhalation (Dust/mist): 0.05mg/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 immediately 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).

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### **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**

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.

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### **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

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### **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:

Contaminated 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)

	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
	VLEP	ROMANIA	10.000		15.000		
	VLA	SPAIN	10.000				Inhalable fraction
	SUVA	SWITZERLAND	3.000				Respirable aerosol
	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
	ACGIH		0.025				(R), A2 - Pulm fibrosis, lung cancer
	EU		0.1				
	MAK	AUSTRIA	0.050				
Silica crystalline, quartz (respirable fraction) CAS: 14808-60-7	VLEP	FRANCE	0.100				Respirable aerosol
	ÁK	HUNGARY	0.150				Respirable aerosol
	NDS	POLAND	0.100				
	VLA	SPAIN	0.050				
	SUVA	SWITZERLAND	0.150				Respirable aerosol
	MAC	NETHERLANDS	0.075				Respirable dust
	GVI	CROATIA	0.100				
	MV	SLOVENIA	0.150				
	IPRV	LITHUANIA	0.100				
	ACGIH		0.025				(R), A2 - Pulm fibrosis, lung cancer
	EU		0.100				
	ACGIH			10			(IFV) - Hematologic, liver and kidney eff
2-(2-butoxyethoxy)ethanol CAS: 112-34-5	EU		67.5	10	101.2	15	
	MAK	AUSTRIA	67.500	10	101.200	15.000	
	VLEP	BELGIUM	67.500	10.000	101.200	15.000	
	VLEP	FRANCE	67.500	10.000	101.200	15.000	
	AGW	GERMANY	67.000	10.000	100.500	15.000	
	MAK	GERMANY	67.000	10.000	100.500	15.000	
	ÁK	HUNGARY	67.500		101.200		
	VLEP	ITALY	67.500	10.000	101.200	15.000	
	NDS	POLAND	67.000		100.000		

	VLEP	ROMANIA	67.500	10.000	101.200	15.000	
	VLA	SPAIN	67.500	10.000	101.200	15.000	
	SUVA	SWITZERLAND	67.000	10.000	101.000	15.000	
	MAC	NETHERLANDS	50.000		100.000		
	WEL	U.K.	67.500	10.000	101.200	15.000	
	VLE	PORTUGAL	67.500	10.000	101.200	15.000	
	GVI	CROATIA	67.500	10.000	101.200	15.000	
	MV	SLOVENIA	67.500	10.000	101.200	15.000	
2-octyl-2H-isothiazol-3-one CAS: 26530-20-1	MAK	AUSTRIA	0.05		0.1		Inhalable aerosol
	AGW	GERMANY	0.050		0.100		Inhalable fraction, Skin
	MAK	GERMANY	0.050		0.100		Inhalable fraction, Skin
	SUVA	SWITZERLAND	0.050		0.100		Inhalable aerosol
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	AUSTRIA	0.050				
	MAK	GERMANY	0.200		0.400		Inhalable fraction
	SUVA	SWITZERLAND	0.200		0.400		Inhalable fraction
2-methylisothiazol-3(2H)-one CAS: 2682-20-4	MAK	AUSTRIA	0.050				
	MAK	GERMANY	0.200		0.400		Inhalable fraction
	SUVA	SWITZERLAND	0.200		0.400		Inhalable fraction

#### Predicted No Effect Concentration (PNEC) values

	PNEC Limit	Exposure Route	Exposure Frequency	Remark
2-(2-butoxyethoxy)ethanol CAS: 112-34-5	1.1 mg/l	Fresh Water		
	0.11 mg/l	Marine water		
	4.4 mg/kg	Freshwater sediments		
	0.44 mg/kg	Marine water		
	0.32 mg/kg	Soil		

#### Derived No Effect Level (DNEL) values

	Worker Industrial	Worker Professional	Consumer	Exposure Route	Exposure Frequency	Remark
2-(2-butoxyethoxy)ethanol CAS: 112-34-5	67.5 mg/m3			Human Inhalation	Long Term, systemic effects	
	101.2 mg/m3			Human Inhalation	Short Term, local effects	
		6.25 mg/kg		Human Oral	Long Term, systemic effects	

## 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. 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  $\geq 0.4$  mm; permeation time  $\geq 480$  min.; Butyl caoutchouc (butyl rubber): thickness  $\geq 0.4$  mm; permeation time  $\geq 480$  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.

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## 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:  $> 93^{\circ}\text{C}$

Auto-ignition temperature: N.D.

Decomposition temperature: N.D.

pH:  $\geq 8.00 \leq 9.00$  ( Internal method )

Kinematic viscosity: N.A.

Relative density:  $1,20 \div 1,40$  kg/l ( Internal method )

Vapour density: N.A.

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.

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## 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

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### 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	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
2-(2-butoxyethoxy)ethanol	a) acute toxicity	LD50 Oral Mouse 2410 mg/kg  LC50 Inhalation Vapour Rat > 29 ppm 2h LD50 Skin Rabbit 2764 mg/kg
1,2-benzisothiazol-3(2H)-one	a) acute toxicity	ATE - Oral : 500 mg/kg bw  ATE - Inhalation (Dust/mist) : 0.05 mg/l
pyrithione zinc	a) acute toxicity	ATE - Oral : 221 mg/kg bw ATE - Inhalation (Dust/mist) : 0.14 mg/l
2-octyl-2H-isothiazol-3-one	a) acute toxicity	ATE - Oral : 125 mg/kg bw  ATE - Dermal : 311 mg/kg bw ATE - Inhalation (Dust/mist) : 0.27 mg/l
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	a) acute toxicity	ATE - Oral : 100 mg/kg bw  ATE - Dermal : 50 mg/kg bw ATE - Inhalation (Dust/mist) : 0.05 mg/l



2-methylisothiazol-3(2H)-one

ATE - Oral : 100 mg/kg bw

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  $\geq 0.1\%$

## 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

The product is classified: Aquatic Chronic 3(H412)

#### 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
2-(2-butoxyethoxy)ethanol	CAS: 112-34-5 - EINECS: 203-961-6 - INDEX: 603-096-00-8	a) Aquatic acute toxicity : LC50 Fish 1300 mg/l 96h  a) Aquatic acute toxicity : EC50 Daphnia > 100 mg/l 48h a) Aquatic acute toxicity : EC50 Algae > 100 mg/l 96h
1,2-benzisothiazol-3(2H)-one	CAS: 2634-33-5 - EINECS: 220-120-9 - INDEX: 613-088-00-6	a) Aquatic acute toxicity : LC50 Fish 11 mg/l 96h  a) Aquatic acute toxicity : EC50 Daphnia 16.4 mg/l 48h a) Aquatic acute toxicity : EC50 Algae 0.6 mg/l 72h b) Aquatic chronic toxicity : NOEC Fish 1.05 mg/l - 28d b) Aquatic chronic toxicity : NOEC Daphnia 6 mg/l - 21d b) Aquatic chronic toxicity : NOEC Algae 0.2 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
		b) Aquatic chronic toxicity : NOEC Algae 0.03 mg/l 72h

## 12.2. Persistence and degradability

Component	Persistence/Degradability:
2-(2-butoxyethoxy)ethanol	Readily biodegradable
1,2-benzisothiazol-3(2H)-one	Non-readily biodegradable
pyrithione zinc	Readily biodegradable
2-octyl-2H-isothiazol-3-one	Non-readily biodegradable
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	Non-readily biodegradable
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  $\geq 0.1\%$

## 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.

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## 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

ADR-Shipping Name: N/A  
IATA-Technical name: N/A  
IMDG-Technical name: N/A

### 14.3. Transport hazard class(es)

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  
ADR - Hazard identification number: 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  
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.

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## 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, 55, 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), pyrrithione 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.

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**SECTION 16: Other information**

Code	Description
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H351	Suspected of causing cancer if inhaled.
H372	Causes damage to organs through prolonged or repeated exposure.
H372	Causes damage to organs through prolonged or repeated exposure if inhaled.
H412	Harmful to aquatic life with long lasting effects.

Code	Hazard class and hazard category	Description
3.3/2	Eye Irrit. 2	Eye irritation, Category 2
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 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
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:

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:

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  
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 information
- SECTION 15: Regulatory information