

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

1.1. Product identifier

Mixture identification:
Trade name: Linea start Acrilossanico R
Commercial codes: .560
UFI: R6D1-H0SG-Q006-D1MN; X9D1-10FW-000P-2D6Q

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

Recommended use:
Wall paint ; professional use
Uses advised against:
No specific exclusion are known

1.3. Details of the supplier of the safety data sheet

Company:
ARD RACCANELLO SPA
Prima strada, 13 Zona Industriale Nord
35129 PADOVA - ITALY
Tel. +390498060000 Fax. +39049773749 (only available during office hours 8.00 - 17.00)
Competent person responsible for the safety data sheet:
regulatory@ard-raccanello.it

1.4. Emergency telephone number

Tel. +390498060000 Fax. +39049773749 (only available during office hours 8.00 - 17.00)
Antipoison Center – Ospedale Niguarda – Milano - tel. +390266101029
Antipoison Center – Policlinico A.Gemelli – Roma - tel. +39063054343
Health and Safety Executive (HSE) Chemicals Regulation Directorate 5S.1 Redgrave Court, Merton Road, Bootle,
Merseyside. L20 7HS, tel.: +44 151 951 3317 (from 9.00am to 5.30pm Monday to Friday). Great Britain

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP)



Warning, Skin Sens. 1A, 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

Hazard pictograms:



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 vapours.
P280 Wear protective gloves and face protection.
P501 Dispose of container in accordance with local regulation.

Special Provisions:

None

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: May produce an allergic reaction.

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 $\geq 0.1\%$

Other Hazards:

No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

The product is not considered as a substance.

Data not available

3.2. Mixtures

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

Qty	Name	Ident. Number	Classification
0,25% - 0,6%	Crystalline silica (respirable fraction)	CAS: 14808-60-7 EC: 238-878-4	 3.9/1 STOT RE 1 H372
0,025% - 0,0359%	1,2-benzisothiazol-3(2H)-one	Index number: 613-088-00-6 CAS: 2634-33-5 EC: 220-120-9	 3.1/2/Inhal Acute Tox. 2 H330  3.1/4/Oral Acute Tox. 4 H302  3.2/2 Skin Irrit. 2 H315  3.3/1 Eye Dam. 1 H318  3.4.2/1A Skin Sens. 1A H317  4.1/A1 Aquatic Acute 1 H400 M=1.  4.1/C1 Aquatic Chronic 1 H410 M=1. Specific Concentration Limits: C $\geq 0,036\%$: Skin Sens. 1A H317 Acute Toxicity Estimate: ATE - Oral 450 mg/kg bw ATE - Inhalation (Dust/mist) 0,21 mg/L
0,005% - 0,01%	2-octyl-2H-isothiazol-3-one	Index number: 613-112-00-5 CAS: 26530-20-1 EC: 247-761-7	 3.1/2/Inhal Acute Tox. 2 H330  3.1/3/Dermal Acute Tox. 3 H311  3.1/3/Oral Acute Tox. 3 H301  3.2/1 Skin Corr. 1 H314  3.3/1 Eye Dam. 1 H318  3.4.2/1A Skin Sens. 1A H317  4.1/A1 Aquatic Acute 1 H400 M=100.  4.1/C1 Aquatic Chronic 1 H410 M=100. EUH071 Specific Concentration Limits: C $\geq 0,0015\%$: Skin Sens. 1A H317 Acute Toxicity Estimate: ATE - Oral 125 mg/kg bw ATE - Dermal 311 mg/kg bw ATE - Inhalation (Dust/mist) 0,27 mg/L
0,005% - 0,01%	Terbutryn	CAS: 886-50-0 EC: 212-950-5	 3.1/4/Oral Acute Tox. 4 H302 4.4/PMT PMT EUH450  3.4.2/1B Skin Sens. 1B H317  4.1/A1 Aquatic Acute 1 H400 M=100.  4.1/C1 Aquatic Chronic 1 H410 M=100.

0,005% - 0,01%	ethylene glycol	Index number: 603-027-00-1 CAS: 107-21-1 EC: 203-473-3 REACH No.: 01-2119456816-28-XXXX	 3.1/4/Oral Acute Tox. 4 H302  3.9/2 STOT RE 2 H373
0,005% - 0,01%	propan-2-ol	Index number: 603-117-00-0 CAS: 67-63-0 EC: 200-661-7 REACH No.: 01-2119457558-25-XXXX	 2.6/2 Flam. Liq. 2 H225  3.3/2 Eye Irrit. 2 H319  3.8/3 STOT SE 3 H336
0,0006% - 0,00149%	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	Index number: 613-167-00-5 CAS: 55965-84-9 EC: 611-341-5	 3.1/2/Inhal Acute Tox. 2 H330  3.1/2/Dermal Acute Tox. 2 H310  3.1/3/Oral Acute Tox. 3 H301  3.2/1C Skin Corr. 1C H314  3.3/1 Eye Dam. 1 H318  3.4.2/1A Skin Sens. 1A H317  4.1/A1 Aquatic Acute 1 H400 M=100.  4.1/C1 Aquatic Chronic 1 H410 M=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
0,0006% - 0,00149%	2-methylisothiazol-3(2H)-one	Index number: 613-326-00-9 CAS: 2682-20-4 EC: 220-239-6	 3.1/3/Dermal Acute Tox. 3 H311  3.1/3/Oral Acute Tox. 3 H301  3.3/1 Eye Dam. 1 H318  3.2/1B Skin Corr. 1B H314  3.4.2/1A Skin Sens. 1A H317  3.1/2/Inhal Acute Tox. 2 H330  4.1/A1 Aquatic Acute 1 H400 M=10.  4.1/C1 Aquatic Chronic 1 H410 EUH071 Specific Concentration Limits: C >= 0,0015%: Skin Sens. 1A H317 Acute Toxicity Estimate: ATE - Inhalation (Dust/mist) 0,134 mg/L
85 ppb	formaldehyde	Index number: 605-001-00-5 CAS: 50-00-0 EC: 200-001-8 REACH No.: 01-2119488953-20-XXXX	 3.1/2/Inhal Acute Tox. 2 H330  3.1/4/Oral Acute Tox. 4 H302  3.2/1B Skin Corr. 1B H314  3.4.2/1A Skin Sens. 1A H317  3.5/2 Muta. 2 H341  3.6/1B Carc. 1B H350  3.8/3 STOT SE 3 H335 Specific Concentration Limits: C >= 25%: Skin Corr. 1B H314 5% <= C < 25%: Skin Irrit. 2 H315 5% <= C < 25%: Eye Irrit. 2 H319 C >= 5%: STOT SE 3 H335 Acute Toxicity Estimate: ATE - Oral 500 mg/kg bw

			ATE - Inhalation (Gas) 100 ppmV
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SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

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:

Rinse immediately with plenty of water and seek medical advice.

In case of Ingestion:

Get medical advice/attention if you feel unwell.

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

None

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).

Treatment:

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

The product is not flammable. Choose the most appropriate extinguishing media for the specific situation.

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

May produce toxic fumes of carbon monoxide if burning.

Do not inhale explosion and combustion gases.

Hazardous combustion products:

Carbon monoxide

5.3. Advice for firefighters

Use fire fighter's clothing conforming to European standard EN469.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non emergency personnel:

Alert the personnel responsible for the management of such emergencies. Move away from the accident area if you are not in possession of the personal protective equipment listed in Section 8

For emergency responders:

Remove all staff who are not adequately equipped to deal with the emergency.

Wear suitable personal protective equipment referred to in section 8 of the safety data sheet to prevent contamination of skin, eyes and personal clothing. Stop the leak if there is no danger.

Make the area affected by the accident accessible to workers only after adequate reclamation has taken place. Air the premises affected by the accident.

6.2. Environmental precautions

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

Retain contaminated washing water and dispose it.

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.

For cleaning up:

Wash with plenty of water.

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.
See also section 8 for recommended protective equipment.
Advice on general occupational hygiene:
Contaminated clothing should be changed before entering eating areas.
Do not eat or drink while working.

7.2. Conditions for safe storage, including any incompatibilities

Keep away from food, drink and feed.
Incompatible materials:
Keep away from acids.
Instructions as regards storage premises:
Adequately ventilated premises.

7.3. Specific end use(s)

None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limit(s):

Crystalline silica (respirable fraction) - CAS: 14808-60-7
EU - TWA(8h): 1 mg/m³
ACGIH - TWA(8h): 0.025 mg/m³ - Notes: (R), A2 - Pulm fibrosis, lung cancer
ethylene glycol - CAS: 107-21-1
EU - TWA(8h): 52 mg/m³, 20 ppm - STEL: 104 mg/m³, 40 ppm - Notes: Skin
ACGIH - STEL: 10 mg/m³ - Notes: (I, H), A4 - URT irr
propan-2-ol - CAS: 67-63-0
EU - TWA(8h): 200 ppm - STEL(15'): 400 ppm
ACGIH - TWA(8h): 200 ppm - STEL: 400 ppm - Notes: A4, BEI - Eye and URT irr, CNS impair
formaldehyde - CAS: 50-00-0
ACGIH - TWA(8h): 0.1 ppm - STEL: 0.3 ppm - Notes: DSEN, RSEN, A1 - URT and eye irr, URT cancer
EU - TWA(8h): 0.37 mg/m³, 0.3 ppm - STEL: 0.74 mg/m³, 0.6 ppm - Notes: Dermal sensitisation

DNEL Values:

1,2-benzisothiazol-3(2H)-one - CAS: 2634-33-5
Worker Professional: 6.81 mg/m³ - Consumer: 1.2 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term, systemic effects
Worker Professional: 0.966 mg/kg bw/day - Consumer: 0.345 mg/kg bw/day - Exposure: Human Dermal - Frequency: Long Term, systemic effects
ethylene glycol - CAS: 107-21-1
Worker Professional: 35 mg/m³ - Consumer: 7 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term, local effects
Worker Professional: 106 mg/kg bw/day - Consumer: 53 mg/kg bw/day - Exposure: Human Dermal - Frequency: Long Term, systemic effects
propan-2-ol - CAS: 67-63-0
Worker Professional: 500 mg/m³ - Consumer: 89 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term, systemic effects
Worker Professional: 1000 mg/m³ - Consumer: 178 mg/m³ - Exposure: Human Inhalation - Frequency: Short Term, systemic effects
Worker Professional: 888 mg/kg bw/day - Consumer: 319 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects
Consumer: 26 mg/kg bw/day - Exposure: Human Oral - Frequency: Long Term, systemic effects
Consumer: 51 mg/kg bw/day - Exposure: Human Oral - Frequency: Short Term, systemic effects
2-methylisothiazol-3(2H)-one - CAS: 2682-20-4
Worker Professional: 0.021 mg/m³ - Consumer: 0.021 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term, local effects
Worker Professional: 0.043 mg/m³ - Consumer: 0.043 mg/m³ - Exposure: Human Inhalation - Frequency: Short Term, local effects
Consumer: 0.027 mg/kg bw/day - Exposure: Human Oral - Frequency: Long Term, systemic effects
Consumer: 0.053 mg/kg bw/day - Exposure: Human Oral - Frequency: Short Term, systemic effects

formaldehyde - CAS: 50-00-0

Worker Professional: 9 mg/m³ - Consumer: 3.2 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term, systemic effects
Worker Professional: 0.375 mg/m³ - Consumer: 0.1 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term, local effects
Worker Professional: 0.75 mg/m³ - Exposure: Human Inhalation - Frequency: Short Term, local effects
Worker Professional: 240 mg/kg bw/day - Consumer: 102 mg/kg bw/day - Exposure: Human Dermal - Frequency: Long Term, systemic effects
Worker Professional: 37 µg/m³ - Consumer: 12 µg/cm² - Exposure: Human Dermal - Frequency: Long Term, local effects
Consumer: 4.1 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects

PNEC Values:

1,2-benzisothiazol-3(2H)-one - CAS: 2634-33-5
Target: Fresh Water - Value: 4.03 µg/l
Target: Marine water - Value: 0.403 µg/l
Target: Microorganisms in sewage treatments - Value: 1.03 mg/l
Target: Freshwater sediments - Value: 49.9 µg/kg
Target: Marine water sediments - Value: 4.99 µg/kg
Target: Soil - Value: 3 mg/kg
2-octyl-2H-isothiazol-3-one - CAS: 26530-20-1
Target: Fresh Water - Value: 2.2 µg/l
Target: Marine water - Value: 0.22 µg/l
Target: Freshwater sediments - Value: 47.5 µg/kg
Target: Marine water sediments - Value: 4.75 µg/kg
Target: Soil - Value: 8.2 µg/kg
2-methylisothiazol-3(2H)-one - CAS: 2682-20-4
Target: Fresh Water - Value: 3.39 µg/l
Target: Marine water - Value: 3.39 µg/l
Target: Microorganisms in sewage treatments - Value: 0.23 mg/l
Target: Soil - Value: 0.047 mg/kg

8.2. Exposure controls

Appropriate engineering controls:

Provide adequate ventilation of the environment (spare ventilation whenever possible and good general aspiration). If these measures are not sufficient to maintain exposure below the expected values, adequate individual protection methods should be used. Personal protective equipment must comply with the relevant CE standards, maintained and stored appropriately. Workers must be educated and trained on the use of protective equipment provided.

Eye/ face protection:

For spray application, use basket eye glasses, according to EN 166

Skin protection

a) protection for hands:

One-time gloves.

Gloves must comply with Regulation (EU) 2016/425 and EN 374. The choice of gloves must take into account the compatibility of the glove with the manipulated substance, degradation, breakage time, permeation depending on the duration of the glove use; check with the supplier the most appropriate protection index. Always check the integrity of the gloves before use.

b) other:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Respiratory protection:

Combination filtering device (DIN EN 141).

Thermal Hazards:

None

Environmental exposure controls:

Where practicable, physical methods, such as impervious sheeting.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Method:	Notes:
Physical state:	Liquid	--	--
Colour:	Data not available	--	--
Odour:	Characteristic: slightly acrylic	--	--
Melting point/freezing point:	Data not available	--	--
Boiling point or initial boiling point and boiling range:	Data not available	--	--
Flammability:	Data not available	--	--
Lower and upper explosion limit:	Data not available	--	--

Flash point:	Not flammable	--	--
Auto-ignition temperature:	Data not available	--	--
Decomposition temperature:	Data not available	--	--
pH:	9.0	--	--
Kinematic viscosity:	> 20.5	--	--
Solubility in water:	Miscible	--	--
Solubility in oil:		--	--
Partition coefficient n-octanol/water (log value):	Data not available	--	--
Vapour pressure:	Data not available	--	--
Density and/or relative density:	1590 - 1630 g/l	--	--
Relative vapour density:	Data not available	--	--
Particle characteristics:			
Particle size:	Data not available	--	--

9.2. Other information

Properties	Value	Method:	Notes:
Viscosity:	14000 - 18000 cp	--	--

Note: The data herein refer to QC when the product was put on the market.

SECTION 10: Stability and reactivity

10.1. Reactivity

There are no particular reaction hazards if employed and stored under normal conditions.

10.2. Chemical stability

Stable under normal conditions

10.3. Possibility of hazardous reactions

None

10.4. Conditions to avoid

Avoid contact with strong mineral acids and reducing agents.

The presence of water or moisture during storage may result in lumps formation and loss of technical performance of the product.

10.5. Incompatible materials

Strong acid, strong oxidizing agents, water.

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 product:

Linea start Acrilsilossanico R

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. 1A 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 of the main substances found in the product:

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

- a) acute toxicity
 - ATE - Oral 450 mg/kg bw
 - ATE - Inhalation (Dust/mist) 0,21 mg/L
 - Test: LD50 - Route: Oral - Species: Rat 490 mg/kg bw

2-octyl-2H-isothiazol-3-one - CAS: 26530-20-1

- a) acute toxicity
 - ATE - Oral 125 mg/kg bw
 - ATE - Dermal 311 mg/kg bw
 - ATE - Inhalation (Dust/mist) 0,27 mg/L
 - Test: LD50 - Route: Oral - Species: Rat 125 mg/kg bw
 - Test: LC50 - Route: Inhalation 270 mg/m3
 - Test: LD50 - Route: Skin 311 mg/kg bw
- b) skin corrosion/irritation:
 - Test: Skin Corrosive Positive
- c) serious eye damage/irritation:
 - Test: Eye Corrosive Positive
- d) respiratory or skin sensitisation:
 - Test: Skin Sensitization Positive

ethylene glycol - CAS: 107-21-1

- a) acute toxicity:
 - Test: LD50 - Route: Oral - Species: Rat 7712 mg/kg bw
- propan-2-ol - CAS: 67-63-0

- a) acute toxicity:
 - Test: LD50 - Route: Skin - Species: Rabbit 16.4 ml/kg
 - Test: LC50 - Route: Inhalation Vapour - Species: Rat > 10000 ppm
 - Test: LD50 - Route: Oral - Species: Rat 5.84 g/kg - Duration: 4h

reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) - CAS: 55965-84-9

- a) acute toxicity:
 - Test: LD50 - Route: Oral - Species: Rat = 64 mg/kg
 - Test: LC50 - Route: Inhalation - Species: Rat = 0.33 mg/L - Duration: 4h
- b) skin corrosion/irritation:
 - Test: Skin Corrosive - Species: Rabbit Positive
- c) serious eye damage/irritation:
 - Test: Eye Corrosive - Species: Rabbit Positive
- d) respiratory or skin sensitisation:
 - Test: Skin Sensitization - Species: Cavia porcellus Positive
- e) germ cell mutagenicity:
 - Test: Mutagenesis Negative
- f) carcinogenicity:
 - Test: Carcinogenicity Negative
- g) reproductive toxicity:
 - Test: Reproductive Toxicity Negative

2-methylisothiazol-3(2H)-one - CAS: 2682-20-4

- a) acute toxicity
 - ATE - Inhalation (Dust/mist) 0,134 mg/L
 - Test: LD50 - Route: Oral - Species: Rat 120 mg/kg bw
 - Test: LD50 - Route: Skin - Species: Rat 242 mg/kg bw

formaldehyde - CAS: 50-00-0

- a) acute toxicity
 - ATE - Oral 500 mg/kg bw
 - ATE - Inhalation (Gas) 100 ppmV
 - Test: LD50 - Route: Oral - Species: Rat 460 mg/kg bw
 - Test: LC50 - Route: Inhalation - Species: Rat < 463 ppm - Duration: 4h
- b) skin corrosion/irritation:

Test: Skin Corrosive - Route: Skin - Species: Rabbit Positive

11.2. Information on other hazards

Endocrine disrupting properties:

No endocrine disruptor substances present in concentration $\geq 0.1\%$

SECTION 12: Ecological information

12.1. Toxicity

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

Linea start Acrilsilossanico R

The product is classified: Aquatic Chronic 3 - H412

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

a) Aquatic acute toxicity:

Endpoint: EC50 - Species: Daphnia = 3.27 mg/L - Duration h: 48 - Notes: Daphnia magna (OECD 202) S2240

Endpoint: EC50 - Species: Algae = 0.11 mg/L - Duration h: 72 - Notes: Selenastrum capricornutum (OECD 201) S 2238

Endpoint: LC50 - Species: Fish = 1.6 mg/L - Duration h: 96 - Notes: Oncorhynchus mykiss (OECD 203) S 2746

b) Aquatic chronic toxicity:

Endpoint: NOEC - Species: Daphnia = 1.2 mg/L - Duration h: 504 - Notes: Daphnia magna (OECD 211) S 803

2-octyl-2H-isothiazol-3-one - CAS: 26530-20-1

a) Aquatic acute toxicity:

Endpoint: IC50 - Species: Algae = 0.084 mg/L - Duration h: 72 - Notes: Scenedesmus subspicatus, (OECD 201) S 63

Endpoint: EC50 - Species: Daphnia = 0.32 mg/L - Duration h: 48 - Notes: Daphnia magna, OECD 202

Endpoint: LC50 - Species: Fish = 0.047 mg/L - Duration h: 96 - Notes: Oncorhynchus mykiss, (OECD 203) S 93

Endpoint: NOEC - Species: Daphnia = 0.002 mg/L - Duration h: 504 - Notes: Daphnia magna, (OECD 211) S 96

Endpoint: NOEC - Species: Fish = 0.022 mg/L - Duration h: 672 - Notes: Oncorhynchus mykiss, (OECD 210) S159

Endpoint: NOEC - Species: Algae = 0.004 mg/L - Duration h: 72 - Notes: Algae, (OECD 201) S 63

Terbutryn - CAS: 886-50-0

a) Aquatic acute toxicity:

Endpoint: EC50 - Species: Algae = 0.0067 mg/L - Duration h: 48 - Notes: OECD 201, Scenedesmus subspicatus

propan-2-ol - CAS: 67-63-0

a) Aquatic acute toxicity:

Endpoint: IC50 - Species: Fish > 6.55 g/L - Duration h: 96 - Notes: Fathead minnows

Endpoint: LC50 - Species: Daphnia = 13299 mg/L - Duration h: 48 - Notes: Daphnia magna

reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) - CAS: 55965-84-9

a) Aquatic acute toxicity:

Endpoint: NOEC - Species: Algae = 0.0014 mg/L - Duration h: 72 - Notes: Skeletonema costatum, static test, speed of growth

Endpoint: EC50 - Species: Algae = 0.027 mg/L - Duration h: 72 - Notes: Pseudokirchneriella subcapitata- OECD 201

Endpoint: EC50 - Species: Daphnia = 0.16 mg/L - Duration h: 48 - Notes: Daphnia magna- OECD 202

Endpoint: EC50 - Species: Fish = 0.19 mg/L - Duration h: 96 - Notes: Oncorhynchus mykiss- OECD 203

b) Aquatic chronic toxicity:

Endpoint: NOEC - Species: Daphnia = 0.004 mg/L - Duration h: 504 - Notes: Daphnia magna (OECD 211) S 52

Endpoint: NOEC - Species: Fish = 0.098 mg/L - Duration h: 672 - Notes: Oncorhynchus mykiss (OECD 210) S 117

2-methylisothiazol-3(2H)-one - CAS: 2682-20-4

a) Aquatic acute toxicity:

Endpoint: EC50 - Species: Daphnia = 1.68 mg/L - Duration h: 48 - Notes: Daphnia magna (OECD 202) S 126

Endpoint: EC50 - Species: Algae = 0.157 mg/L - Duration h: 72 - Notes: Pseudokirchneriella subcapitata (OECD 201) S 128

Endpoint: LC50 - Species: Fish = 6.0 mg/L - Duration h: 96 - Notes: Oncorhynchus mykiss (OECD 203) S 27

b) Aquatic chronic toxicity:

Endpoint: NOEC - Species: Daphnia = 0.55 mg/L - Duration h: 504 - Notes: Daphnia magna (OECD 211) S 792

Endpoint: NOEC - Species: Fish = 2.38 mg/L - Duration h: 672 - Notes: Pimephales promelas (OECD 210) S 794

formaldehyde - CAS: 50-00-0

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish = 6.7 mg/L - Duration h: 96
Endpoint: EC50 - Species: Daphnia = 5.8 mg/L - Duration h: 48
Endpoint: EC50 - Species: Algae > 3.48 mg/L - Duration h: 72

12.2. Persistence and degradability

2-octyl-2H-isothiazol-3-one - CAS: 26530-20-1
Biodegradability: Readily biodegradable - %: 0.6-1.4 - Notes: Simulation biodegradation-Surface water, half-life, (OECD 309) S 635
ethylene glycol - CAS: 107-21-1
Biodegradability: Readily biodegradable
propan-2-ol - CAS: 67-63-0
Biodegradability: Readily biodegradable - Test: Biochemical oxygen demand - Notes: Test OECD 301E
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) - CAS: 55965-84-9
Biodegradability: Readily biodegradable - Test: Oxygen consumption - Notes: OECD 301 D (Closed-Bottle-Test)

12.3. Bioaccumulative potential

2-octyl-2H-isothiazol-3-one - CAS: 26530-20-1
Bioaccumulation: Not bioaccumulative - Test: log Kow 2.45
Terbutryn - CAS: 886-50-0
Bioaccumulation: Not bioaccumulative - Test: log Kow 3.2
ethylene glycol - CAS: 107-21-1
Bioaccumulation: Not bioaccumulative - Test: Kow - Partition coefficient -1.36
propan-2-ol - CAS: 67-63-0
Bioaccumulation: Not bioaccumulative - Test: log Kow 0.05
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) - CAS: 55965-84-9
Bioaccumulation: Not bioaccumulative - Test: log Kow -0.75

12.4. Mobility in soil

ethylene glycol - CAS: 107-21-1
Mobility in soil: Mobile

12.5. Results of PBT and vPvB assessment

vPvB Substances: None - PBT Substances: None

12.6. Endocrine disrupting properties

No endocrine disruptor substances present in concentration $\geq 0.1\%$

12.7. Other adverse effects

None

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Re-use if possible. Residues of the product are to be considered hazardous special wastes. The hazardous level of the waste that contains this product must be assessed in accordance with the EU laws in force. The correct attribution of the EWC code is the responsibility of the waste manufacturer, according to the production process that generated it.

The suggested EWC codes are:

08 01 11* waste paint and varnish containing organic solvents or other hazardous substances.

16 03 04* inorganic wastes other than those mentioned in 16 03 03.

The disposal must be entrusted to companies authorized to waste management, in compliance with national and possibly local regulations.

The transport of the wastes could be subjected to the ADR law.

AVOID release into sewers, water or soil. AVOID release to the environment.

CONTAMINATED CONTAINERS

Completely empty and cleaned containers can be reused.

Packaging contaminated with residues shall be considered as hazardous special waste and must be sent to recovery or disposal in accordance with national rules on waste management at authorised holdings.

The suggested EWC codes are:

15 01 10* packaging containing residues of or contaminated by hazardous substances.

AVOID release to the environment.

SECTION 14: Transport information

14.1. UN number or ID number

Not classified as dangerous in the meaning of transport regulations.

14.2. UN proper shipping name

Data not available

14.3. Transport hazard class(es)

Data not available

14.4. Packing group

Data not available

14.5. Environmental hazards

Data not available

14.6. Special precautions for user

Data not available

14.7. Maritime transport in bulk according to IMO instruments

Data not available

SECTION 15: Regulatory information

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

DIR.2004/42/CE. Subcategory c Type BA limit COV 40 g/l. Contained in product < 40 g/l.

Regulation (EU) No 528/2012 and subsequent amendments.

This product contains biocides with fungicidal and algacidal action. Active ingredients:

2-octyl-2H-isothiazol-3-one

Terbutryn

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

Directive 2000/39/CE (Occupational exposure limit values) and subsequent modifications: 2004/37/CE, 2006/15/CE and 2009/161/UE.

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)

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:

Restriction 3

Restriction 40

Restrictions related to the substances contained:

Restriction 28

Restriction 72

Restriction 75

Restriction 77

None

Where applicable, refer to the following regulatory provisions :

Directive 2012/18/EU (Seveso III)

Commission Decision 2014/955/EU amending Decision 2000/532/EC on the list of waste pursuant to Directive 2008/98/EC of the European Parliament and of the Council.

Dir. 2004/42/EC (VOC directive)

Provisions related to directive EU 2012/18 (Seveso III):
Seveso III category according to Annex 1, part 1
None

15.2. Chemical safety assessment

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

SECTION 16: Other information

Full text of phrases referred to in Section 3:

H372 Causes damage to organs through prolonged or repeated exposure.
H330 Fatal if inhaled.
H302 Harmful if swallowed.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H317 May cause an allergic skin reaction.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H311 Toxic in contact with skin.
H301 Toxic if swallowed.
H314 Causes severe skin burns and eye damage.
EUH071 Corrosive to the respiratory tract.
EUH450 Can cause long-lasting and diffuse contamination of water resources.
H373 May cause damage to organs through prolonged or repeated exposure.
H225 Highly flammable liquid and vapour.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
H310 Fatal in contact with skin.
H341 Suspected of causing genetic defects.
H350 May cause cancer.
H335 May cause respiratory irritation.

Hazard class and hazard category	Code	Description
Flam. Liq. 2	2.6/2	Flammable liquid, Category 2
Acute Tox. 2	3.1/2/Dermal	Acute toxicity (dermal), Category 2
Acute Tox. 2	3.1/2/Inhal	Acute toxicity (inhalation), Category 2
Acute Tox. 3	3.1/3/Dermal	Acute toxicity (dermal), Category 3
Acute Tox. 3	3.1/3/Oral	Acute toxicity (oral), Category 3
Acute Tox. 4	3.1/4/Oral	Acute toxicity (oral), Category 4
Skin Corr. 1	3.2/1	Skin corrosion, Category 1
Skin Corr. 1B	3.2/1B	Skin corrosion, Category 1B
Skin Corr. 1C	3.2/1C	Skin corrosion, Category 1C
Skin Irrit. 2	3.2/2	Skin irritation, Category 2
Eye Dam. 1	3.3/1	Serious eye damage, Category 1
Eye Irrit. 2	3.3/2	Eye irritation, Category 2
Skin Sens. 1A	3.4.2/1A	Skin Sensitisation, Category 1A
Skin Sens. 1B	3.4.2/1B	Skin Sensitisation, Category 1B
Muta. 2	3.5/2	Germ cell mutagenicity, Category 2
Carc. 1B	3.6/1B	Carcinogenicity, Category 1B
STOT SE 3	3.8/3	Specific target organ toxicity - single exposure, Category 3
STOT SE 3	3.8/3	Specific target organ toxicity - single exposure, Category 3
STOT RE 1	3.9/1	Specific target organ toxicity - repeated exposure, Category 1
STOT RE 2	3.9/2	Specific target organ toxicity - repeated exposure, Category 2
Aquatic Acute 1	4.1/A1	Acute aquatic hazard, category 1
Aquatic Chronic 1	4.1/C1	Chronic (long term) aquatic hazard, category 1
Aquatic Chronic 3	4.1/C3	Chronic (long term) aquatic hazard, category 3
PMT	4.4/PMT	Persistent, mobile and toxic

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
Skin Sens. 1A, H317	Calculation method
Aquatic Chronic 3, H412	Calculation method

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

Main bibliographic sources:

The ECHA database on registered substances.
ESIS- European chemical Substances Information System.
eChemPortal- the global portal to Information on Chemical Substance.
GESTIS substance database.

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 of acronyms and abbreviations used in the safety data sheet:

ADR:	European Agreement concerning the International Carriage of Dangerous Goods by Road.
ATE:	Acute Toxicity Estimate
ATEmix:	Acute toxicity Estimate (Mixtures)
CAS:	Chemical Abstracts Service (division of the American Chemical Society).
CLP:	Classification, Labeling, Packaging.
DNEL:	Derived No Effect Level.
EC50:	Median effective concentration expected to produce a certain effect in 50% of test organisms
ECHA:	European Chemicals Agency
EINECS:	European Inventory of Existing Commercial Chemical Substances
ELINCS:	European List of notified Chemical Substances
EWC:	European Waste Catalogue
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals.
IATA:	International Air Transport Association.
IATA-DGR:	Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO:	International Civil Aviation Organization.
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IC50:	Half maximal inhibitory concentration.
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
N.A.:	Data not available
NOEC:	No Observed Effect Concentration
Numero EC:	EINECS and ELINCS Number
OEL:	Substance with a Union workplace exposure limit.
PBT:	Persistent, Bioaccumulative and Toxic substance
PNEC:	Predicted No Effect Concentration.
REACH:	Regulation (EC) No 1907/2006 Registration, Evaluation, Authorisation and Restriction of Chemicals
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
SVHC:	Substances of Very High Concern
TLV:	Threshold Limiting Value.
UE:	European Union
vPvB:	Very Persistent and Very Bioaccumulative