

SAFETY DATA SHEET

Garden and Wood Paint

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

1.1. Product identifier

Trade name

Garden and Wood Paint

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

Relevant identified uses of the substance or mixture

None known.

Uses advised against

None known.

1.3. Details of the supplier of the safety data sheet

Company and address

FSW Coatings Ltd.

Ballaghanea, Virginia,

A82 N267, Co Cavan,

Ireland.

353 49854 7209

E-mail

info@fsw.ie

Revision

27/03/2023

SDS Version

1.0

1.4. Emergency telephone number

The National Poisons Information Centre (NPIC)

Public: +353 (0) 1 809 2166 (7 days a week, 8am- 10pm)

Healthcare professionals: +353 (0) 1 809 2566 (24 h service)

See also section 4 "First aid measures"

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Aquatic Chronic 3; H412, Harmful to aquatic life with long lasting effects.

2.2. Label elements

Hazard pictogram(s)

Not applicable.

Signal word

Not applicable.

Hazard statement(s)

Harmful to aquatic life with long lasting effects. (H412)

Precautionary statements

General

-

Prevention

Avoid release to the environment. (P273)

Response

-

Storage

-

Disposal

Dispose of contents/container in accordance with local regulation. (P501)

Hazardous substances

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]

Additional labelling

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), octhilonone (ISO); 2-octyl-2H-isothiazol-3-one; [OIT];octhilonone (ISO);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.

2.3. Other hazards

Additional warnings

This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB.

This product does not contain any substances considered to be endocrine disruptors in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable. This product is a mixture.

3.2. Mixtures

Product/substance	Identifiers	% w/w	Classification	Note
titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]	CAS No.: 13463-67-7 EC No.: 236-675-5 REACH: 01-2119489379-17-XXXX Index No.: 022-006-00-2	15-25%	Carc. 2, H351	
Limestone	CAS No.: 1317-65-3 EC No.: 215-279-6 REACH: Index No.:	3-5%		[19]
pyrithione zinc; (T-4)- bis[1-(hydroxy-kappa.O)pyridine-2(1H)- thionato-kappa.S]zinc	CAS No.: 13463-41-7 EC No.: 236-671-3 REACH: 01-2119511196-46-XXXX Index No.: 613-333-00-7	<0.01%	Acute Tox. 3, H301 (ATE: 221.00 mg/kg) Eye Dam. 1, H318 Acute Tox. 2, H330 Repr. 1B, H360D STOT RE 1, H372 Aquatic Acute 1, H400 (M=1000) Aquatic Chronic 1, H410 (M=10)	
octhilonone (ISO); 2-octyl-2H-isothiazol-3-one; [OIT];octhilonone (ISO);2-octyl-2H-isothiazol-3-one	CAS No.: 26530-20-1 EC No.: 247-761-7 REACH: 01-2120768921-45-XXXX Index No.: 613-112-00-5	<0.0015%	EUH071 Acute Tox. 3, H301 (ATE: 125.00 mg/kg) Acute Tox. 3, H311 (ATE: 311.00 mg/kg) Skin Corr. 1, H314 Skin Sens. 1A, H317 (SCL: 0.0015 %) Eye Dam. 1, H318 Acute Tox. 2, H330 Aquatic Acute 1, H400 (M=100) Aquatic Chronic 1, H410 (M=100)	
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 No.: 55965-84-9 EC No.: 911-418-6 REACH: Index No.:	<0.0015%	Acute Tox. 3, H301 Acute Tox. 2, H310 Skin Corr. 1C, H314 (SCL: 0.60 %) Skin Irrit. 2, H315 (SCL: 0.059 %) Skin Sens. 1A, H317 (SCL: 0.0014 %) Eye Dam. 1, H318 (SCL: 0.60 %) Acute Tox. 1, H330 Aquatic Acute 1, H400 (M=100) Aquatic Chronic 1, H410 (M=100)	
formaldehyde ...%	CAS No.: 50-00-0 EC No.: 200-001-8 REACH: 01-2119488953-20-XXXX Index No.: 605-001-00-5	<0.0015%	Acute Tox. 3, H301 Acute Tox. 3, H311 Skin Corr. 1B, H314 (SCL: 25.00 %) Skin Irrit. 2, H315 (SCL: 5.00 %) Skin Sens. 1, H317 (SCL: 0.20 %) Eye Irrit. 2, H319 (SCL: 5.00 %) Acute Tox. 3, H331	[1]

STOT SE 3, H335 (SCL: 5.00 %)
Muta. 2, H341
Carc. 1B, H350

See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

Other information

[1] European occupational exposure limit.

[19] UVCB = Unknown or variable composition, complex reaction products or of biological materials

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In the case of accident: Contact a doctor or casualty department – take the label or this safety data sheet. Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

Inhalation

Upon breathing difficulties or irritation of the respiratory tract: Bring the person into fresh air and stay with him/her.

Skin contact

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

Remove contaminated clothing and shoes. Ensure to wash exposed skin thoroughly with water and soap. DO NOT use solvents or thinners.

If skin irritation occurs: Get medical advice/attention.

Eye contact

Upon irritation of the eye: Remove contact lenses and open eyes widely. Flush eyes with water or saline water (20-30 °C) for at least 5 minutes. Seek medical assistance and continue flushing during transport.

Ingestion

If the person is conscious, rinse the mouth with water and stay with the person. Never give the person anything to drink.

In case of malaise, seek medical advice immediately and bring the safety data sheet or label from the product. Do not induce vomiting, unless recommended by the doctor. Have the person lean forward with head down to avoid inhalation of or choking on vomited material.

Burns

Not applicable.

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

Sensitisation: This product contains substances, which may trigger allergic reaction upon dermal contact.

Manifestation of allergic reactions typically takes place within 12-72 hours after exposure.

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

None known.

Information to medics

Bring this safety data sheet or the label from this product.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: Alcohol-resistant foam, carbon dioxide, powder, water mist.

Unsuitable extinguishing media: Waterjets should not be used, since they can spread the fire.

5.2. Special hazards arising from the substance or mixture

Fire will result in dense smoke. Exposure to combustion products may harm your health. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.

If the product is exposed to high temperatures, e.g. in the event of fire, dangerous decomposition compounds are produced. These are:

Carbon oxides (CO / CO₂)

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact the National Poisons Information Centre (NPIC) on +353 (0) 1 809 256 (24 h service) in order to obtain further advice.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

No specific requirements.

6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc. In the event of leakage to the surroundings, contact local environmental authorities.

6.3. Methods and material for containment and cleaning up

Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.

Wherever possible cleaning should be performed with normal cleaning agents. Avoid use of solvents.

6.4. Reference to other sections

See section 13 "Disposal considerations" on handling of waste.

See section 8 "Exposure controls/personal protection" for protective measures.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

It is recommended to install waste collection trays in order to prevent emissions to the waste water system and surrounding environment.

Smoking, drinking and consumption of food is not allowed in the work area.

See section 8 "Exposure controls/personal protection" for information on personal protection.

7.2. Conditions for safe storage, including any incompatibilities

Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Recommended storage material

Always store in containers of the same material as the original container.

Storage temperature

No specific requirements

Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

7.3. Specific end use(s)

This product should only be used for applications quoted in section 1.2.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter $\leq 10 \mu\text{m}$]
Long term exposure limit (8 hours) (mg/m^3): 10(total inhalable dust) / 4(respirable dust)

Limestone

Long term exposure limit (8 hours) (mg/m^3): 4

Propane-1,2-diol

Long term exposure limit (8 hours) (mg/m^3): 470 (total (vapour and particulates)) / 10(particulates)

Long term exposure limit (8 hours) (ppm): 150 (total (vapour and particulates))

formaldehyde ...%

Long term exposure limit (8 hours) (mg/m^3): 0.37

Long term exposure limit (8 hours) (ppm): 0.3

Short term exposure limit (15 minutes) (mg/m^3): 0.738

Short term exposure limit (15 minutes) (ppm): 0.6

Annotations:

Sen = Chemical agent which following exposure may cause sensitisation of the respiratory tract and lead to asthma, rhinitis or extrinsic allergic alveolitis.

2021 Code of Practice for the Safety, Health and Welfare at Work (Chemical Agents) Regulations (2001-2015) and the Safety, Health and Welfare at Work (Carcinogens) Regulations (2001-2019).

DNEL

formaldehyde ...%

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Duration:	Route of exposure:	DNEL:
Long term – Local effects - General population	Dermal	12 µg/cm ²
Long term – Local effects - Workers	Dermal	37 µg/cm ²
Long term – Systemic effects - General population	Dermal	102 mg/kg bw/day
Long term – Systemic effects - Workers	Dermal	240 mg/kg bw/day
Long term – Local effects - General population	Inhalation	100 µg/m ³
Long term – Local effects - Workers	Inhalation	375 µg/m ³
Long term – Systemic effects - General population	Inhalation	3.2 mg/m ³
Long term – Systemic effects - Workers	Inhalation	9 mg/m ³
Short term – Local effects - Workers	Inhalation	750 µg/m ³
Long term – Systemic effects - General population	Oral	4.1 mg/kg bw/day
Propane-1,2-diol		
Duration:	Route of exposure:	DNEL:
Long term – Local effects - General population	Inhalation	10 mg/m ³
Long term – Local effects - Workers	Inhalation	10 mg/m ³
Long term – Systemic effects - General population	Inhalation	50 mg/m ³
Long term – Systemic effects - Workers	Inhalation	168 mg/m ³
pyrithione zinc; (T-4)- bis[1-(hydroxy-.kappa.O)pyridine-2(1H)- thionato-.kappa.S]zinc		
Duration:	Route of exposure:	DNEL:
Long term – Systemic effects - Workers	Dermal	10 µg/kgbw/day
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)		
Duration:	Route of exposure:	DNEL:
Long term – Local effects - General population	Inhalation	20 µg/m ³
Long term – Local effects - Workers	Inhalation	20 µg/m ³
Short term – Local effects - General population	Inhalation	40 µg/m ³
Short term – Local effects - Workers	Inhalation	40 µg/m ³
Long term – Systemic effects - General population	Oral	90 µg/kgbw/day
Short term – Systemic effects - General population	Oral	110 µg/kgbw/day
titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]		
Duration:	Route of exposure:	DNEL:
Long term – Local effects - General population	Inhalation	28 µg/m ³
Long term – Local effects - Workers	Inhalation	170 µg/m ³
PNEC		
formaldehyde ...%		
Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		440 µg/L
Freshwater sediment		2.3 mg/kg
Intermittent release (freshwater)		4.44 mg/L
Marine water		440 µg/L
Marine water sediment		2.3 mg/kg
Sewage treatment plant		190 µg/L
Soil		200 µg/kg
octhilinone (ISO); 2-octyl-2H-isothiazol-3-one; [OIT];octhilinone (ISO);2-octyl-2H-isothiazol-3-one		
Route of exposure:	Duration of Exposure:	PNEC:

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Freshwater		2.2 µg/L
Freshwater sediment		47.5 µg/kg
Intermittent release (freshwater)		1.22 µg/L
Intermittent release (marine water)		122 ng/L
Marine water		220 ng/L
Marine water sediment		4.75 µg/kg
Soil		8.2 µg/kg
Propane-1,2-diol		
Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		260 mg/L
Freshwater sediment		572 mg/kg
Intermittent release (freshwater)		183 mg/L
Marine water		26 mg/L
Marine water sediment		57.2 mg/kg
Sewage treatment plant		20 g/L
Soil		50 mg/kg
pyrithione zinc; (T-4)- bis[1-(hydroxy-.kappa.O)pyridine-2(1H)- thionato-.kappa.S]zinc		
Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		90 ng/L
Freshwater sediment		9.5 µg/kg
Marine water		90 ng/L
Marine water sediment		9.5 µg/kg
Sewage treatment plant		10 µg/L
Soil		1.02 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)		
Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		3.39 µg/L
Freshwater sediment		27 µg/kg
Intermittent release (freshwater)		3.39 µg/L
Intermittent release (marine water)		3.39 µg/L
Marine water		3.39 µg/L
Marine water sediment		27 µg/kg
Sewage treatment plant		230 µg/L
Soil		10 µg/kg

8.2. Exposure controls

Compliance with the given occupational exposure limits values should be controlled on a regular basis.

General recommendations

Smoking, drinking and consumption of food is not allowed in the work area.

Exposure scenarios

There are no exposure scenarios implemented for this product.

Exposure limits

Professional users are subjected to the legally set maximum concentrations for occupational exposure. See occupational hygiene limit values above.

Appropriate technical measures

The formation of vapours must be kept at a minimum and below current limit values (see above). Installation of a local exhaust system if normal air flow in the work room is not sufficient is recommended. Ensure eyewash and emergency showers are clearly marked.

Hygiene measures

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

In between use of the product and at the end of the working day all exposed areas of the body must be washed thoroughly. Always wash hands, forearms and face.

Measures to avoid environmental exposure

Keep damming materials near the workplace. If possible, collect spillage during work.

Individual protection measures, such as personal protective equipment

Generally

Use only CE marked protective equipment.

Respiratory Equipment

No specific requirements

Skin protection

No specific requirements.

Hand protection

Material	Glove thickness (mm)	Breakthrough time (min.)	Standards
Nitrile	0.4	> 480	EN374-2, EN374-3, EN388



Eye protection

Type	Standards
Safety glasses with side shields.	EN166



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state

Liquid

Colour

Black, White

Odour / Odour threshold

Testing not relevant or not possible due to the nature of the product.

pH

7.5 - 9

Density (g/cm³)

Testing not relevant or not possible due to the nature of the product.

Relative density

1.26

Kinematic viscosity

0.21 cm²/s (40 °C)

Particle characteristics

Does not apply to liquids.

Phase changes

Melting point/Freezing point (°C)

May start to solidify at the temperatures below 2°C. This is based on data for the following ingredient: water.

Softening point/range (waxes and pastes) (°C)

Does not apply to liquids.

Boiling point (°C)

42

Vapour pressure

3.2 kPa (20 °C)

Relative vapour density

7.5

Decomposition temperature (°C)

Testing not relevant or not possible due to the nature of the product.

Data on fire and explosion hazards

Flash point (°C)

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Not applicable

Flammability (°C)

Testing not relevant or not possible due to the nature of the product.

Auto-ignition temperature (°C)

Testing not relevant or not possible due to the nature of the product.

Lower and upper explosion limit (% v/v)

Testing not relevant or not possible due to the nature of the product.

Solubility

Solubility in water

Soluble in cold water or warm water.

n-octanol/water coefficient

Testing not relevant or not possible due to the nature of the product.

Solubility in fat (g/L)

Testing not relevant or not possible due to the nature of the product.

9.2. Other information

VOC (g/L)

30

Other physical and chemical parameters

Volume solids: 41.0% +/- 1.0%. Weight Solids: 53.0% +/- 1.0%.

Oxidizing properties

Testing not relevant or not possible due to the nature of the product.

SECTION 10: Stability and reactivity

10.1. Reactivity

No data available.

10.2. Chemical stability

The product is stable under the conditions, noted in section 7 "Handling and storage".

10.3. Possibility of hazardous reactions

None known.

10.4. Conditions to avoid

None known.

10.5. Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

10.6. Hazardous decomposition products

The product is not degraded when used as specified in section 1.

SECTION 11: Toxicological information

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

Acute toxicity

Product/substance	titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]
Test method:	OECD 425
Species:	Rat
Route of exposure:	Oral
Test:	LD50
Result:	>5000 mg/kg

Product/substance	titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]
Species:	Rabbit
Route of exposure:	Dermal
Test:	LD50
Result:	>5000 mg/kg

Product/substance	titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]
Species:	Rat
Route of exposure:	Inhalation
Test:	LC50 (4 hours)

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Result:	>6.8 mg/L
Product/substance	Limestone
Species:	Rat
Route of exposure:	
Test:	LD50
Result:	>5000 mg/kg
Product/substance	Propane-1,2-diol
Species:	Rat
Route of exposure:	Oral
Test:	LD50
Result:	2200 mg/kg
Product/substance	Propane-1,2-diol
Species:	Rabbit
Route of exposure:	Inhalation
Test:	LC50 (2 hours)
Result:	>317 mg/L
Product/substance	Propane-1,2-diol
Species:	Rabbit
Route of exposure:	Dermal
Test:	LD50
Result:	>2000 mg/kg
Product/substance	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)
Species:	Rat
Route of exposure:	Oral
Test:	LD50
Result:	40 mg/kg
Product/substance	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)
Species:	Rabbit
Route of exposure:	Dermal
Test:	LD50
Result:	87 mg/kg
Product/substance	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)
Species:	Rat
Route of exposure:	Inhalation
Test:	LC50
Result:	0,33 mg/l
Product/substance	formaldehyde ...%
Species:	Rat
Route of exposure:	Oral
Test:	LD50
Result:	>200 mg/kg

Skin corrosion/irritation

Based on available data, the classification criteria are not met.

Serious eye damage/irritation

Based on available data, the classification criteria are not met.

Respiratory sensitisation

Based on available data, the classification criteria are not met.

Skin sensitisation

This product contains substances that may trigger an allergic reaction in already sensitized persons.

Germ cell mutagenicity

Based on available data, the classification criteria are not met.

Carcinogenicity

Based on available data, the classification criteria are not met.

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Reproductive toxicity

Based on available data, the classification criteria are not met.

STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

11.2. Information on other hazards

Long term effects

None known.

Endocrine disrupting properties

Not applicable.

Other information

titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm] has been classified by IARC as a group 2B carcinogen.
formaldehyde ...% has been classified by IARC as a group 1 carcinogen.

SECTION 12: Ecological information

12.1. Toxicity

Product/substance	titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]
Species:	Fish, Pimephales promelas
Duration:	96 hours
Test:	LC50
Result:	>1000 mg/L

Product/substance	titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]
Test method:	OECD 202
Species:	Daphnia, Daphnia magna
Duration:	48 hours
Test:	LC50
Result:	>100 mg/L

Product/substance	titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]
Species:	Algae, Pseudokirchneriella subcapitata
Duration:	72 hours
Test:	EC50
Result:	16 mg/L

Product/substance	Limestone
Species:	Fish, Oncorhynchus mykiss
Duration:	96 hours
Test:	LC50
Result:	>10 mg/L

Product/substance	Limestone
Species:	Daphnia
Duration:	48 hours
Test:	EC50
Result:	>1 mg/L

Product/substance	Limestone
Species:	Algae, Desmodesmus subspicatus
Duration:	72 hours
Test:	NOEC
Result:	75 mg/L

Product/substance	Limestone
Species:	Algae, Desmodesmus subspicatus
Duration:	72 hours

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Test:	EC50
Result:	289 mg/L
Product/substance	Propane-1,2-diol
Species:	Daphnia
Duration:	48 hours
Test:	EC50
Result:	43500 mg/L
Product/substance	Propane-1,2-diol
Species:	Fish, Oncorhynchus mykiss
Duration:	96 hours
Test:	LC50
Result:	40613 mg/L
Product/substance	Propane-1,2-diol
Species:	Algae, Pseudokirchneriella subcapitata
Duration:	96 hours
Test:	EC50
Result:	19000 mg/L
Product/substance	Propane-1,2-diol
Species:	Bacteria, Pseudomonas putida
Duration:	18 hours
Test:	NOEC
Result:	20000 mg/L
Product/substance	octhiline (ISO); 2-octyl-2H-isothiazol-3-one; [OIT]; octhiline (ISO); 2-octyl-2H-isothiazol-3-one
Test method:	OECD 201
Species:	Fish, Scenedesmus subspicatus
Duration:	72 hours
Test:	EC50
Result:	0.084 mg/L
Product/substance	octhiline (ISO); 2-octyl-2H-isothiazol-3-one; [OIT]; octhiline (ISO); 2-octyl-2H-isothiazol-3-one
Test method:	OECD 202
Species:	Daphnia
Duration:	48 hours
Test:	EC50
Result:	0.42 mg/L
Product/substance	octhiline (ISO); 2-octyl-2H-isothiazol-3-one; [OIT]; octhiline (ISO); 2-octyl-2H-isothiazol-3-one
Test method:	OECD 201
Species:	Algae
Duration:	72 hours
Test:	NOEC
Result:	0.004 mg/L
Product/substance	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)
Species:	Bacteria
Duration:	16 hours
Test:	EC50
Result:	5,7 mg/l
Product/substance	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)
Species:	Fish, Oncorhynchus mykiss
Duration:	96 hours
Test:	LC50
Result:	0,19 mg/l
Product/substance	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)
Species:	Fish, Sheepshead Minnow

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Duration:	96 hours
Test:	LC50
Result:	0,3 mg/l
Product/substance	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)
Species:	Fish, Fathead Minnow
Duration:	36 days
Test:	NOEL
Result:	0,02 mg/l
Product/substance	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)
Species:	Algae, Diatom
Duration:	72 hours
Test:	EC50
Result:	0.0199 mg/l
Product/substance	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)
Species:	Algae, Green algae
Duration:	72 hours
Test:	EC50
Result:	0,027 mg/l
Product/substance	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)
Species:	Algae, Diatom
Duration:	48 hours
Test:	NOEC
Result:	0.00049 mg/l
Product/substance	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)
Species:	Algae, Green algae
Duration:	72 hours
Test:	NOEC
Result:	0,004 mg/l
Product/substance	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)
Species:	Crustacean, Copepods
Duration:	48 hours
Test:	EC50
Result:	0,007 mg/l
Product/substance	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)
Species:	Crustacean, Water flea
Duration:	48 hours
Test:	EC50
Result:	0,099 mg/l
Product/substance	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)
Species:	Crustacean, Water flea
Duration:	21 days
Test:	NOEC
Result:	0.004 mg/l

12.2. Persistence and degradability

Product/substance	Propane-1,2-diol
Biodegradable:	Yes
Test method:	OECD 301 F
Result:	81.7%

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

12.3. Bioaccumulative potential

Product/substance Propane-1,2-diol
Test method:
Potential bioaccumulation: No data available.
LogPow: No data available.
BCF: 0.09
Other information:

Product/substance 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)
Test method:
Potential bioaccumulation: No data available.
LogPow: No data available.
BCF: 54
Other information:

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB.

12.6. Endocrine disrupting properties

Not applicable.

12.7. Other adverse effects

This product contains substances, which may cause adverse long-term effects to the aquatic environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product is covered by the regulations on hazardous waste.
HP 7 – Carcinogenic
HP 14 – Ecotoxic
Dispose of contents/container to an approved waste disposal plant.
Commission Regulation (EU) No 1357/2014 of 18 December 2014 on waste.

EWC code

Not applicable.

Specific labelling

Not applicable.

Contaminated packing

Packaging containing residues of the product must be disposed of similarly to the product.

SECTION 14: Transport information

	14.1 UN / ID	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other information:
ADR	-	-	-	-	-	-
IMDG	-	-	-	-	-	-
IATA	-	-	-	-	-	-

* Packing group

** Environmental hazards

Additional information

Not dangerous goods according to ADR, IATA and IMDG.

14.6. Special precautions for user

Not applicable.

14.7. Maritime transport in bulk according to IMO instruments

No data available.

SECTION 15: Regulatory information

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

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Restrictions for application

People under the age of 18 shall not be exposed to this product.

Demands for specific education

No specific requirements.

SEVESO - Categories / dangerous substances

formaldehyde ...%

Additional information

Not applicable.

Sources

SI No 209 of 2015 Chemicals Act (Control of Major Accident Hazards involving Dangerous Substances) Regulations 2015.

Commission Regulation (EU) No 1357/2014 of 18 December 2014 on waste.

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (CLP).

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

15.2. Chemical safety assessment

No

SECTION 16: Other information

Full text of H-phrases as mentioned in section 3

EUH071, Corrosive to the respiratory tract.
H301, Toxic if swallowed.
H310, Fatal in contact with skin.
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.
H318, Causes serious eye damage.
H319, Causes serious eye irritation.
H330, Fatal if inhaled.
H331, Toxic if inhaled.
H335, May cause respiratory irritation.
H341, Suspected of causing genetic defects.
H350, May cause cancer.
H351, Suspected of causing cancer.
H360D, May damage the unborn child.
H372, Causes damage to organs through prolonged or repeated exposure.
H400, Very toxic to aquatic life.
H410, Very toxic to aquatic life with long lasting effects.

Abbreviations and acronyms

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway
ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
CAS = Chemical Abstracts Service
CE = Conformité Européenne
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
CSA = Chemical Safety Assessment
CSR = Chemical Safety Report
DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level
EINECS = European Inventory of Existing Commercial chemical Substances
ES = Exposure Scenario
EUH statement = CLP-specific Hazard statement
EWC = European Waste Catalogue
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IARC = International Agency for Research on Cancer (IARC)
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
OECD = Organisation for Economic Co-operation and Development
PBT = Persistent, Bioaccumulative and Toxic
PNEC = Predicted No Effect Concentration
RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
RRN = REACH Registration Number
SCL = A specific concentration limit
SVHC = Substances of Very High Concern
STOT-RE = Specific Target Organ Toxicity - Repeated Exposure
STOT-SE = Specific Target Organ Toxicity - Single Exposure
TWA = Time weighted average
UN = United Nations
UVBC = Unknown or variable composition, complex reaction products or of biological materials
VOC = Volatile Organic Compound
vPvB = Very Persistent and Very Bioaccumulative

Additional information

The classification of the substance/mixture in regard of environmental hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP).

The safety data sheet is validated by

Christopher Murray

Other

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a blue triangle.

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.

Country-language: IE-en