

## SAFETY DATA SHEET

### SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

#### 1.1. Product identifier:

**REVCO VARIO+ render**

UFI: 07K0-T02P-300R-2MP3

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

Acrylate-based facade colouring plaster. For consumer, professional use.

#### 1.3. Details of the supplier of the safety data sheet:

##### Information about the manufacturer:

**Saint-Gobain Hungary Kft.**

2085 Pilisvörösvár, Bécsi út 07/5 hrsz.

Hungary

Tel.: 06 26 567 600

#### 1.3.1. Responsible person:

Attila Balogh

#### E-mail:

[attila.balogh@saint-gobain.com](mailto:attila.balogh@saint-gobain.com)

#### 1.4. Emergency telephone number:

*Please fill in*

### SECTION 2: HAZARDS IDENTIFICATION

#### 2.1. Classification of the substance or mixture:

Classification according to Regulation (EC) No 1272/2008 (CLP):

Sensitisation - Skin, hazard category 1A – H317

Hazardous to the aquatic environment – Chronic Hazard, Category 3 – H412

##### **Hazard statements:**

**H317** – May cause an allergic skin reaction.

**H412** – Harmful to aquatic life with long lasting effects.

#### 2.2. Label elements:

Components that define the hazards: 2-Octyl-2H-isothiazol-3-one; Tetrahydro-1,3,4,6-tetrakis(hydroxymethyl)imidazo[4,5-d]imidazole-2,5(1H,3H)-dione; Terbutryn; Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)



##### **Hazard statements:**

**H317** – May cause an allergic skin reaction.

**H412** – Harmful to aquatic life with long lasting effects.

**Precautionary statements:**

**P102** – Keep out of reach of children.  
**P262** – Do not get in eyes, on skin, or on clothing.  
**P273** – Avoid release to the environment.  
**P280** – Wear protective gloves.  
**P302 + P352** – IF ON SKIN: Wash with plenty of water.  
**P333 + P313** – If skin irritation or rash occurs: Get medical advice/attention.  
**P301 + P310** – IF SWALLOWED: Immediately call a POISON CENTER or doctor.  
**P501** – Dispose of contents/container in accordance with local regulations.

**2.3. Other hazards:**

Adverse physico-chemical, human health and environmental effects:

Eye contact: Tearing, reddening of the eyes may occur.

Skin contact: May cause allergic reaction.

Ingestion: May cause nausea, abdominal pain.

Results of PBT and vPvB assessment: Based on available data, the product does not contain ingredients that meet the criteria for PBT or vPvB substances.

Endocrine disrupting property: Based on available data, does not contain endocrine disruptors.

### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

**3.1. Substances:**

Not applicable.

**3.2. Mixtures:**

Description	CAS number	EC number / ECHA list number	REACH registration number	Conc. (%)	Classification according to Regulation (EC) No 1272/2008 (CLP)		
					Pictogram , signal word code(s)	Hazard class and category code(s)	Hazard statement code(s)
<b>Tetrahydro-1,3,4,6-tetrakis(hydroxymethyl)imidazo[4,5-d]imidazole-2,5(1H,3H)-dione*</b>	5395-50-6	226-408-0	-	> 0.02 - < 0.06	GHS07 Warning	Skin Sens. 1	H317
<b>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</b>	55965-84-9	-	-	> 0.0015 - < 0.002	GHS06 GHS05 GHS09 Danger	Acute Tox. 2 Acute Tox. 2 Acute Tox. 3 Skin Corr. 1C Eye Dam. 1 Skin Sens. 1A Aquatic Acute 1 M= 100 Aquatic Chronic 1 M= 100	H330 H310 H301 H314 H318 H317 H400 H410 EUH071
<b>Terbutryn*</b>	886-50-0	212-950-5	-	> 0.02 - < 0.03	GHS07 GHS09 Warning	Acute Tox. 4 Skin Sens. 1B Aquatic Acute 1 M= 10 Aquatic Chronic 1 M = 10	H302 H317 H400 H410

<b>Zinc oxide</b> Index number: 030-013-00-7	1314-13-2	215-222-5	01-2119463881-32	> 0.01 - < 0.02	GHS09 Warning	Aquatic Acute 1 M = 1 Aquatic Chronic 1 M = 1	H400 H410
<b>Pyrithione zinc</b> Index number: 613-333-00-7	13463-41-7	236-671-3	-	> 0.01 - < 0.02	GHS08 GHS06 GHS05 GHS09 Danger	Repr. 1B Acute Tox. 2 Acute Tox. 3 STOT RE 1 Eye Dam. 1 Aquatic Acute 1 M = 1000 Aquatic Chronic 1 M = 10	H360D H330 H301 H372 H318 H400 H410
<b>2-Octyl-2H-isothiazol-3-one</b> Index number: 613-112-00-5	26530-20-1	247-761-7	-	> 0.0015 - < 0.01	GHS06 GHS05 GHS09 Danger	Acute Tox. 2 Acute Tox. 3 Acute Tox. 3 Skin Corr. 1 Eye Dam. 1 Skin Sens. 1A Acute 1 M = 100 Aquatic Chronic 1 M = 100	H330 H311 H301 H314 H318 H317 H400 H410 EUH071
<b>Calcium carbonate*</b>	1317-65-3	215-279-6	-	> 70 - < 80	-	not classified	-
<b>Titanium dioxide*</b>	13463-67-7	236-675-5	01-2119489379-17-0014	> 0.1 - < 1	-	not classified	-

\*: Classification specified by the manufacturer; the substance is not listed in Annex VI of the Regulation (EC) No 1272/2008.

**Pyrithione zinc (CAS: 13463-41-7):**

inhalation: ATE = 0,14 mg/L (dusts or mists)  
 oral: ATE = 221 mg/kg bw

**2-Octyl-2H-isothiazol-3-one (CAS: 26530-20-1):**

inhalation: ATE = 0,27 mg/L (dusts or mists)  
 dermal: ATE = 311 mg/kg bw  
 oral: ATE = 125 mg/kg bw

Specific concentration limits:

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

Skin Corr. 1C; H314: C ≥ 0,6 %  
 Skin Irrit. 2; H315: 0,06 % ≤ C < 0,6 %  
 Eye Dam. 1; H318: C ≥ 0,6 %  
 Eye Irrit. 2; H319: 0,06 % ≤ C < 0,6 %  
 Skin Sens. 1A; H317: C ≥ 0,0015 %

**2-Octyl-2H-isothiazol-3-one (CAS: 26530-20-1):**

Skin Sens. 1A; H317: C ≥ 0,0015 %

It does not contain any other substance considered to be hazardous to health or to the environment, which is classified as a PBT or vPvB substance, which has a workplace exposure limit value, or its concentration does not reach the level specified in the relevant legislation and therefore it does not need to be included in the safety data sheet.

For the full text of hazard statements, see Section 16.

## SECTION 4: FIRST AID MEASURES

### 4.1. Description of first aid measures:

**General information:** Take off contaminated clothing immediately. In case of complaints, obtain medical help.

#### INGESTION:

Measures:

- Immediately call a physician.
- Rinse mouth with water and give the victim plenty of water to drink.
- Take victim into fresh air, loosen tight clothes and place in a comfortable position.

#### INHALATION:

Measures:

- No risk of inhalation.
- If inhaled, take victim into fresh air, let him rest and loosen tight clothing.
- In case of complaints, symptoms, obtain medical help.

#### SKIN CONTACT:

Measures:

- Take off contaminated, soaked clothing and shoes.
- Immediately wash the skin with plenty of running water and soap.
- In case of skin irritation or rash: obtain medical help.
- It is FORBIDDEN to wash skin with solvents!

#### EYE CONTACT:

Measures:

- In case of contact with eyes, immediately flush with water holding eyelids apart for at least 10 minutes.
- If the victim is wearing contact lenses, remove the lenses immediately.
- Consult specialist.

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

Eye contact: may cause tearing, redness.

Skin contact: may cause allergic reaction.

Ingestion: may cause nausea, abdominal pain.

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

No special treatment needed; treat symptomatically.

## SECTION 5: FIREFIGHTING MEASURES

### 5.1. Extinguishing media:

#### 5.1.1. Suitable extinguishing media:

Water spray, water fog, alcohol resistant foam, extinguishing powder, carbon-dioxide.

Choose extinguishing media depending on surrounding fire.

#### 5.1.2. Unsuitable extinguishing media:

No unsuitable extinguishing media known.

### 5.2. Special hazards arising from the substance or mixture:

The formation of dangerous decomposition products greatly depends on the circumstances of the combustion. A complex mixture of airborne solid, liquid and gas substances may occur, such as carbon monoxide, carbon dioxide and unidentified compounds.

The inhalation of such combustion products can have serious adverse effects on health.

### 5.3. Advice for firefighters:

Comply in accordance with the fire safety regulations.

Wear full protective, fire-resistant clothing, protective gloves, protective footwear and self-contained breathing apparatus to protect the eyes and the face.

Do not breathe in gases.

The degree of danger depends on the burning material and the conditions of the fire.

Fire residues and contaminated extinguishing water must be disposed according to local regulations.

Cool the unopened containers with water spray.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

**6.1. Personal precautions, protective equipment and emergency procedures:**

**6.1.1. For non-emergency personnel:**  
Allow only well-trained experts wearing suitable protective clothing to abide in the field of accident.

**6.1.2. For emergency responders:**  
Remove unauthorised person from the affected area.  
Stop the leakage.  
Ventilate contaminated area.  
Avoid contact with skin, eyes and clothing.  
Wear appropriate personal protective equipment (see Section 8) and provide respiratory protection for those involved in the rescue, if necessary (e.g. in case of fire, see Section 5-3).

**6.2. Environmental precautions:**  
Dispose of the spillage and the resulting waste according to the applicable environmental regulations. Do not allow the product and the resulting waste to enter sewers/soil/surface or ground water. Notify the respective authorities in accordance with local law in the case of environmental pollution immediately.

**6.3. Methods and material for containment and cleaning up:**  
Stop the leakage.  
The product should be collected in labelled containers by methods appropriate to its consistency (e.g. pumping).  
The spilled product should be soaked in absorbent, non-combustible material, transported to a safe disposal site and disposed of in accordance with local and national legislation (see section 13).  
Clean surfaces with detergent and water, do not use organic solvents.  
After exposure to air, under normal conditions (see technical data sheet), the material will set after 8-10 hours, after which it can be removed as construction debris.

**6.4. Reference to other sections:**  
For further and detailed information see Sections 5, 8 and 13.

## SECTION 7: HANDLING AND STORAGE

**7.1. Precautions for safe handling:**  
Observe conventional hygiene precautions.  
The workplace and work process must be designed to prevent or minimise direct contact with the product.  
Do not breathe in vapours or sprays.  
Avoid contact with skin and eyes.  
If it gets on the skin, wash thoroughly.  
Do not eat, drink, or smoke when using this product.  
Wash hands after the use of this product.  
Prevent release into the environment.  
**Technical measures:**  
Do not use indoors without ventilation.  
Ensure adequate ventilation and/or exhaustion.  
**Precautions against fire and explosion:**  
No special measures required.

**7.2. Conditions for safe storage, including any incompatibilities:**  
**Technical measures and storage condition:**  
Storage conditions should comply with the general requirements for the storage of chemicals.  
Store in original, sealed packaging in a dry, well-ventilated place out of direct sunlight.  
Keep away from children, food and animal feed.  
In case of accidental damage, separate damaged container immediately and process as quickly as possible.  
Ideal storage and use temperature: 5-25 °C.  
Frost hazard!  
Shelf life: 24 months from date of manufacture.  
**Incompatible materials:** See Section 10.5.  
**Packaging material:** No special prescriptions.

**7.3. Specific end use(s):**  
Acrylate-based facade colouring plaster.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control parameters:

**Occupational exposure limit values** (Commission Directive (EC) No 2000/39 of 8 June 2000):

The components of the mixture are not regulated with exposure limit value.

**Mixture of  $\alpha$ -3-[3-(2H-benzotriazole-2-yl)-5-tert-butyl-4-hydroxyphenyl]propionyl- $\omega$ -hydroxypoly(oxyethylene) and  $\alpha$ -3-[3-(2H-benzotriazole-2-yl)-5-tert-butyl-4-hydroxyphenyl]propionyl- $\omega$ -3-[3-(2H-benzotriazole-2-yl)-5-tert-butyl-4-hydroxyphenyl]propionyloxypoly(oxyethylene):**

DNEL values		Oral exposure		Dermal exposure		Inhalative exposure	
		Short term (acute)	Long term (chronic)	Short term (acute)	Long term (chronic)	Short term (acute)	Long term (chronic)
Consumer	Local	no data	no data	no data	no data	no data	no data
	Systemic	no data	no data	no data	0.25 mg/kg	no data	0.085 mg/m <sup>3</sup>
Worker	Local	no data	no data	no data	no data	no data	no data
	Systemic	no data	no data	no data	0.5 mg/kg	no data	0.35 mg/m <sup>3</sup>

PNEC values		
Compartment	Value	Note(s)
Freshwater	0.0023 mg/l	no notes
Marine water	0.00023 mg/l	no notes
Freshwater sediment	3.37 mg/kg	no notes
Marine water sediment	0.337 mg/kg	no notes
Sewage Treatment Plant (STP)	10 mg/l	no notes
Intermittent release	0.028 mg/l	no notes
Secondary poisoning	no data	PNEC oral value has not been determined because accumulation of in the body is not expected
Soil	2 mg/kg	no notes

**Reaction mass of bis(1,2,2,6,6-Pentamethyl-4-piperidyl)sebacate and methyl-1,2,2,6,6-pentamethyl-4-piperidyl sebacate:**

DNEL values		Oral exposure		Dermal exposure		Inhalative exposure	
		Short term (acute)	Long term (chronic)	Short term (acute)	Long term (chronic)	Short term (acute)	Long term (chronic)
Consumer	Local	no data	no data	no data	no data	no data	no data
	Systemic	no data	no data	no data	0.9 mg/kg	no data	0.31 mg/m <sup>3</sup>
Worker	Local	no data	no data	no data	no data	no data	no data
	Systemic	no data	no data	no data	1.8 mg/kg	no data	1.27 mg/m <sup>3</sup>

PNEC values		
Compartment	Value	Note(s)
Freshwater	0.0022 mg/l	no notes
Marine water	0.00022 mg/l	no notes
Freshwater sediment	1.05 mg/kg	no notes
Marine water sediment	0.11 mg/kg	no notes
Sewage Treatment Plant (STP)	1 mg/l	no notes
Intermittent release	0.009 mg/l	no notes
Secondary poisoning	no data	no notes
Soil	0.21 mg/kg	no notes

**8.2. Exposure controls:**

In case of a hazardous material with no controlled concentration limit it is the employer's duty to keep concentration levels down to a minimum achievable by existing scientific and technological means, where the hazardous substance poses no harm to workers.

**8.2.1. Appropriate engineering controls:**

In pursuance of work is proper foresight needed to avoid spilling onto clothes and floors and to avoid contact with eyes and skin. Ensure adequate ventilation.

Working conditions: drying plaster must be protected from direct sunlight, temperatures above 30 °C, draughts, frost and precipitation. Tools and mixing container must be washed immediately after use, as the product can only be removed mechanically afterwards. It is forbidden to mix the product again or to recycle waste material that has already been cured.

**8.2.2. Individual protection measures, such as personal protective equipment:**

Care should be taken to avoid contact with skin and eyes.

Do not eat, drink, or smoke while working.

Wash hands at the end of the work.

1. **Eye/face protection:** Use appropriate protective glasses (EN ISO 16321-1:2022; EN 166).

2. **Skin protection:**

a. **Hand protection:** Use appropriate protective gloves (EN 374).

Glove materials: nitril rubber, butyl rubber.

The glove material must be impermeable and resistant to the product/substance/preparation.

Select glove material based on the penetration time, rates of diffusion and degradation.

The selection of suitable gloves does not only depend on the material, but also on further marks of quality which may vary from manufacturer to manufacturer.

The exact break through time has to be found out by the manufacturer of the protective gloves.

b. **Other:** Use appropriate protective clothing.

3. **Respiratory protection:** In case of adequate ventilation respiratory protection is not needed.

In case of insufficient ventilation use appropriate respiratory protective device.

Do not breathe in gases/fume/spray or vapours.

4. **Thermal hazards:** No thermal hazards known.

**8.2.3. Environmental exposure controls:**

The provisions of Decree 26/2014 (25.III.) VM (on the limitation of emissions of volatile organic compounds from certain activities) and Decree 4/2011 (14. I.) VM on air pollution level limits and emission limits for stationary sources of air pollution must be considered. These standards apply to normal activities carried out under normal conditions, in a professional manner and for the intended use. In the case of work carried out under other conditions or in exceptional circumstances, it is recommended that additional steps and personal protective equipment should be decided on based on literature or in consultation with an expert.

The requirements detailed in Section 8 assume skilled work under normal conditions and usage of the product for appropriate aims. If conditions differ from normal or work is carried out under extreme conditions, an expert's advice is necessary before deciding upon further protective measures.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

**9.1. Information on basic physical and chemical properties:**

Parameter	Value / Test method / Remarks
1. Physical state	liquid (suspension)
2. Colour	in factory premixed VARIO colour card colours
3. Odour, odour threshold	slight, sweetish
4. Melting point/freezing point	not relevant
5. Boiling point or initial boiling point and boiling range	not relevant
6. Flammability	not flammable
7. Lower and upper explosion limit	not applicable
8. Flash point	not applicable
9. Auto-ignition temperature	not applicable
10. Decomposition temperature	not relevant
11. pH	8-9 (20 °C)
12. Kinematic viscosity	no data*
13. Solubility in water in other solvents	not relevant no data*
14. Partition coefficient n-octanol/water (log value)	not applicable
15. Vapour pressure	not relevant
16. Density and/or relative density	1.65-2.00 g/cm³ (20 °C)
17. Relative vapour density	not applicable
18. Particle characteristics	no data*

**9.2. Other information:**

**9.2.1. Information with regard to physical hazard classes:**

Explosive properties: not explosive.  
Oxidising properties: not oxidizing.

**9.2.2. Other safety characteristics:**

VOC: <40 g/L  
Dynamic viscosity: 400000 – 900000 cP; 20 °C

\*: The manufacturer did not carry out any tests on this parameter for the product or the results of the tests are not available at the time of publication of the data sheet, or the property is not applicable for the product.

## SECTION 10: STABILITY AND REACTIVITY

**10.1. Reactivity:**

No reactivity known.

**10.2. Chemical stability:**

The product is stable under normal conditions of use.

**10.3. Possibility of hazardous reactions:**

No hazardous reactions known under normal conditions of use.

**10.4. Conditions to avoid:**

Frost hazard!

**10.5. Incompatible materials:**

No incompatible materials known.

**10.6. Hazardous decomposition products:**

No hazardous decomposition products known.

## SECTION 11: TOXICOLOGICAL INFORMATION

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

**Acute toxicity:** Based on available data, the classification criteria are not met.

**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 or skin sensitisation:** May cause an allergic skin reaction.

**Germ cell mutagenicity:** Based on available data, the classification criteria are not met.

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

**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.

**11.1.1. Summaries of the information derived from the test conducted:**

No data available.

**11.1.2. Relevant toxicological properties:**

Toxicological test data are not available for the product, thus the toxicological test data available for each component are provided.

Information about the components:

Acute toxicity:

**Terbutryn** (CAS: 886-50-0):

LC50 (inhalation, dust, mist, rat): >8 g/m<sup>3</sup>, 4h

LD50 (dermal, rabbit): >2000 mg/kg

LD50 (oral, female, male rat): 2045 mg/kg

LD50 (oral, female rat): 1000 - 1470 mg/kg

**Zinc oxide** (CAS: 1314-13-2):

LC50 (inhalation, dust, mist, rat): >5.7 mg/l, 4h

LD50 (oral, rat): >15000 mg/kg

**Pyrithione zinc (CAS: 13463-41-7):**

inhalation: ATE = 0,14 mg/L (dusts or mists)  
oral: ATE = 221 mg/kg bw  
LC50 (inhalation, dust, mist, rat): 2.4 mg/l, 1h, aerosol, nose only  
LC50 (inhalation, dust, mist, rat): 0.61 mg/l, 4h, aerosol, nose only  
LD50 (dermal, rabbit): >2000 mg/kg  
LD50 (oral, rat): 269 mg/kg

**2-Octyl-2H-isothiazol-3-one (CAS: 26530-20-1):**

inhalation: ATE = 0.27 mg/L (dusts or mists)  
dermal: ATE = 311 mg/kg bw  
oral: ATE = 125 mg/kg bw

**Skin corrosion/irritation:**

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

OECD 404 (rabbit): corrosive

**2-Octyl-2H-isothiazol-3-one (CAS: 26530-20-1):**

Dermal, rabbit: causes serious eye irritation.

**Serious eye damage/irritation:**

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

OECD 405 (rabbit): serious eye irritation

**2-Octyl-2H-isothiazol-3-one (CAS: 26530-20-1):**

Eye, rabbit: causes serious eye irritation. Exposition: 100 mg

**Respiratory or skin sensitization:**

**Terbutryn (CAS: 886-50-0):**

Skin: sensitizing, OECD 429

**2-Octyl-2H-isothiazol-3-one (CAS: 26530-20-1):**

Skin, mouse: causes sensitivity (OECD 429).

**Chronic effects:**

**Terbutryn (CAS: 886-50-0):**

Sub chronic NOAEL (dermal, rabbit): 1000 mg/kg

Sub chronic LOAEL (dermal, rabbit): >1000 mg/kg

**11.1.3. Information on likely routes of exposure:**

Ingestion, inhalation, skin contact, eye contact.

Most likely: skin, mucous membranes.

**11.1.4. Symptoms related to the physical, chemical and toxicological characteristics:**

Eye contact: may cause tearing, redness.

Skin contact: may cause allergic reaction.

Ingestion: may cause nausea, abdominal pain

**11.1.5. Delayed and immediate effects as well as chronic effects from short and long-term exposure:**

May cause an allergic skin reaction.

**11.1.6. Interactive effects:**

No data available.

**11.1.7. Absence of specific data:**

No information.

**11.2. Information on other hazards:**

**Endocrine disrupting properties:**

Endocrine disrupting property: Based on available data, does not contain endocrine disruptors.

**Other information:**

There are no toxicological tests available for this product. Classification is based on the properties of relevant components.

## SECTION 12: ECOLOGICAL INFORMATION

**12.1. Toxicity:**

Harmful to aquatic life with long lasting effects.

There are no toxicological tests available for this product. Classification is based on the properties of relevant components.

Information about the components:

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

LC50 (Onchorhynchus mykiss): 0.19 mg/l, 96h, mortality

EC50 (Daphnia magna): 0.16 mg/l, 48h, immobilization

EC50 (Selenastrum capricornutum): 0.027 mg/l, 72h, biomass reduction

**Zinc oxide (CAS: 1314-13-2):**

EC50 (alga, *Selenastrum*): 0.17 mg/l, 72h  
IC50 (*Skeletonema costatum*): 1.85 mg/l, 96h, marine water  
IC50 (*Pseudokirchneriella subcapitata*): 46 µg/l, freshwater, exponential growth phase; 72h  
LC50 (*Daphnia magna*): 98 µg/l, 48h, freshwater, newborn  
LC50 (*Oncorhynchus mykiss*): 1.1 ppm, 96h, freshwater

**Pyrithione zinc (CAS: 13463-41-7):**

EC50 (algae): 0.03 mg/l, 72h  
EC50 (*Daphnia*): 0.0082 mg/l, 48h  
LC50 (*Daphnia magna*): 0.0036 mg/l, 48h  
LC50 (fish): 0.0026 mg/l, 96h  
LC50 (fish): 0.0032 mg/l, 48h

**2-Octyl-2H-isothiazol-3-one (CAS: 26530-20-1):**

EC50 (*Desmodesmus subspicatus*): 0.084 mg/l, 72h (OECD 201) S 63  
EC50 (*Daphnia magna*): 0.42 mg/l, 48h (OECD 202) S 95  
LC50 (*Oncorhynchus mykiss*): 0.036 mg/l, 96 h (OECD 203) S 93  
NOEC (*Daphnia magna*): 0.002 mg/l, 21 days (OECD 211) S 96  
NOEC (*Oncorhynchus mykiss*): 0.022 mg/l, 28 days (OECD 210) S 159  
NOEC (algae): 0.004 mg/l, 72h (OECD 201) S 63

Toxicity to organisms in active sludge:

EC20 (active sludge): 10.4 mg/l, 0,5h (TTC-Test (8901 Macherey-Nagel))  
EC20 (active sludge): 7.3 mg/l, 3h (OECD 209)

**12.2. Persistence and degradability:**

Information about the components:

**Terbutryn (CAS: 886-50-0):**

Not readily degradable.

OECD 301 F Manometrikus inhalation: 0 % (active sludge)

OECD 307 Aerobic and anaerobic transformation, soil: 7,7 days (half time)

Behavior in wastewater treatment plants:

OECD 303 A; Wastewater treatment simulation test: <70% (active sludge)

**Pyrithione zinc (CAS: 13463-41-7):**

Readily degradable.

**2-Octyl-2H-isothiazol-3-one (CAS: 26530-20-1):**

OECD 309 biodegradation simulation - surface water: 0.6-1.4 days (half-life)

OECD 309 Biodegradation simulation - seawater: 1.6-2.1 days (half-life) (OECD 309 Biodegradation simulation - surface water)

Behavioral behavior in wastewater treatment plants:

OECD 303 A; active sludge units: >83 % (activated sludge)

**12.3. Bioaccumulative potential:**

Information about the components:

**Terbutryn (CAS: 886-50-0):**

LogPow: 3.66, potential: low

BCF: 103 (calculated) EPIWIN

OECD 117: LogKow (HPLC method): 3,19 (n-octanol/water) S 1211

**Pyrithione zinc (CAS: 13463-41-7):**

LogPow: 0.883, potential: low

**2-Octyl-2H-isothiazol-3-one (CAS: 26530-20-1):**

LogPow: 2.45, potential: low

OECD 117: LogKow (HPLC method): 2,92 (n-octanol/water) S 323

**12.4. Mobility in soil:**

No data available.

**12.5. Results of PBT and vPvB assessment:**

Based on available data, the product does not contain ingredients that meet the criteria for PBT or vPvB substances.

**12.6. Endocrine disrupting properties:**

Endocrine disrupting property: Based on available data, does not contain endocrine disruptors.

**12.7. Other adverse effects:**

Prevent the product from entering water, sewers or soil.

## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1. Waste treatment methods:

Disposal according to the local regulations.

### 13.1.1. Information regarding the disposal of the product:

Dispose of in accordance with applicable regulations.

Do not empty into drains.

#### List of Waste Code:

**08 01 15\*** aqueous sludges containing paint or varnish containing organic solvents or other hazardous substances

In cured state:

**17 09 03\*** other construction and demolition wastes (including mixed wastes) containing hazardous substances

\*: Hazardous waste.

The above mentioned codes are suggestions for classification, the exact waste code is determined by the user on the basis of the above mentioned Regulation.

### 13.1.2. Information regarding the disposal of the packaging:

Dispose of in accordance with applicable regulations.

#### List of Waste Code:

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

\*: Hazardous waste.

### 13.1.3. Physical/chemical properties that may affect waste treatment options shall be specified:

No data available.

### 13.1.4. Sewage disposal:

No data available.

### 13.1.5. Special precautions for any recommended waste treatment:

No data available.

## SECTION 14: TRANSPORT INFORMATION

### ADR/RID; ADN; IMDG; IATA:

Not subject to the conventions of carriage of dangerous goods.

### 14.1. UN number or ID number:

No UN or ID number.

### 14.2. UN proper shipping name:

No proper shipping name.

### 14.3. Transport hazard class(es):

No transport hazard classes.

### 14.4. Packing group:

No packing group.

### 14.5. Environmental hazards:

Not applicable.

### 14.6. Special precautions for user:

No relevant information available.

### 14.7. Maritime transport in bulk according to IMO instruments:

Not applicable.

## SECTION 15: REGULATORY INFORMATION

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

**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), establishing a European Chemicals Agency, amending Directive (EC) No 1999/45 and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive (EEC) No 76/769 and Commission Directives (EEC) No 91/155, (EEC) No 93/67, (EC) No 93/105 and (EC) No 2000/21

**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, amending and repealing Directives (EEC) No 67/548 and (EC) No 1999/45, and amending Regulation (EC) No 1907/2006

**COMMISSION REGULATION (EU) 2020/878** of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

Treated article containing the following biocidal active substances as a preservative: Tetrahydro-1,3,4,6-tetrahydro-1,3,4,6-tetrahydroxymethyl-imidazo[4,5-d]imidazole-2,5(1H,3H)-dione (CAS: 5395-50-6), Terbutryn (CAS: 886-50-0), Reaction mass of 5-chloro-2- methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) (CAS: 55965-84-9), Pyrithione zinc (CAS: 13463-41-7);:2-Octyl-2H-isothiazol-3-one (CAS: 26530-20-1).

The mixture contains a substance that is listed in Annex XVII of Regulation (EC) No 1907/2006 (REACH) and is therefore restricted: **Pyrithione zinc** (CAS: 13463-41-7):

Conditions of restriction: Entry 30. - Reproductive toxicants

**15.2. Chemical safety assessment:** Chemical safety assessment for the product has not been carried out.

## SECTION 16: OTHER INFORMATION

**Information regarding the revision of the safety data sheet:**

The safety data sheet has been revised according to Regulation (EU) 2020/878 (Section 1-16).

The composition and hazard classification of the mixture were not modified compared to the previous version.

This safety data sheet supersedes all previous versions according to Annex II of Regulation (EC) No 1907/2006.

**Literature references / data sources:**

Previous version of the safety data sheet (24. 03. 2025, version 1).

**Methods used for the classification according to Regulation (EC) No 1272/2008:**

Classification	Method
Sensitisation - Skin, hazard category 1A – H317	Based on calculation method
Hazardous to the aquatic environment – Chronic Hazard, Category 3 – H412	Based on calculation method

**Relevant hazard statements (code and full text) of Sections 2 and 3:**

**H301** – Toxic if swallowed.

**H302** – Harmful 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.

**H360D** – May damage the unborn child.

**H372** – Causes damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.

**H400** – Very toxic to aquatic life.

**H410** – Very toxic to aquatic life with long lasting effects.

**H412** – Harmful to aquatic life with long lasting effects.

**EUH 071** – Corrosive to the respiratory tract.

**Training advice:** No data available.

**Full text of the abbreviations in the safety data sheet:**

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.  
ADR: Agreement concerning the International Carriage of Dangerous Goods by Road.  
ATE: Acute Toxicity Estimate.  
AOX: Adsorbable organic halides.  
BCF: Bioconcentration factor.  
BOD: Biological Oxygen Demand.  
CAS number: Chemical Abstract Service number.  
CLP: Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures.  
CMR effects: Carcinogenic, mutagenic, reprotoxic effects.  
COD: Chemical Oxygen Demand.  
CSA: Chemical Safety Assessment.  
CSR: Chemical Safety Report.  
DNEL: Derived-No-Effect-Level.  
ECHA: European Chemical Agency.  
EC: European Community.  
EC number: EINECS and ELINCS numbers (see also EINECS and ELINCS).  
EEC: European Economic Community.  
EEA: European Economic Area (EU + Iceland, Liechtenstein and Norway).  
EINECS: European Inventory of Existing Commercial Chemical Substances.  
ELINCS: European List of Notified Chemical Substances.  
EN: European Norm.  
EU: European Union.  
EuPCS: European Product Categorisation System.  
EWC: European Waste Catalogue (replaced by LoW – see below).  
GHS: Globally Harmonized System of Classification and Labelling of Chemicals.  
IATA: International Air Transport Association.  
ICAO-TI: Technical Instructions for the Safe Transport of Dangerous Goods by Air.  
IMDG: International Maritime Dangerous Goods.  
IMO: International Maritime Organization.  
IMSBC: International Maritime Solid Bulk Cargoes.  
IUCLID: International Uniform Chemical Information Database.  
IUPAC: International Union of Pure and Applied Chemistry.  
Kow: n-Octanol - Water Partition Coefficient.  
LC50: Lethal concentration resulting in 50 % mortality.  
LD50: Lethal dose resulting in 50 % mortality (median lethal dose).  
LoW: List of Waste.  
LOEC: Lowest Observed Effect Concentration.  
LOEL: Lowest Observed Effect Level.  
NOEC: No Observed Effect Concentration.  
NOEL: No Observed Effect Level.  
NOAEC: No Observed Adverse Effect Concentration.  
NOAEL: No Observed Adverse Effect Level.  
OECD: Organization for Economic Cooperation and Development.  
OSHA: Occupational Safety and Health Administration.  
PBT: Persistent, Bioaccumulative and Toxic.  
PNEC: Predicted No Effect Concentration.  
QSAR: Quantitative Structure Activity Relationship.  
REACH: Regulation 1907/2006/EC concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals.  
RID: Regulations Concerning the International Transport of Dangerous Goods by Rail.  
SCBA: Self Contained Breathing Apparatus.  
SDS: Safety Data Sheet.  
STOT: Specific Target Organ Toxicity.  
SVHC: Substances of Very High Concern.  
UN: United Nations.  
UVCB: Chemical Substances of Unknown or Variable Composition, Complex Reaction Products or of Biological Materials.  
VOC: Volatile Organic Compound.  
vPvB: very Persistent and very Bioaccumulative.

This safety data sheet had been prepared on the basis of information provided by the manufacturer/supplier and conform to the relevant regulations.

The information, data and recommendations contained herein are provided in good faith, obtained from reliable sources and believed to be true and accurate as of the date issued; however, no representation is made as to the comprehensiveness of the information.

The SDS shall be used only as a guide for handling the product; in the course of handling and using the product other considerations may arise or be required.

Users are cautioned to determine the appropriateness and applicability of the above information to their particular circumstances and purposes and assume all risk associated with the use of this product.

It is the responsibility of the user to fully comply with local, national and international regulations concerning the use of this product.

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Safety data sheet was prepared by:  
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