SAFETY DATA SHEET

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

1.1. **Product identifier:**
REVCO SILICON facade paint

UFI: NNDF-KWF5-WV0R-YK3U

1.2. **Relevant identified uses of the substance or mixture and uses advised against:**
Outdoor silicone-based wall paint. 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

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

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 the available data, the mixture does not contain any ingredient meeting the criteria for classification as 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)
Tetrahydro-1,3,4,6-tetrakis(hydroxymethyl)imidazo[4,5-d]imidazole-2,5(1H,3H)-dione*	5395-50-6	226-408-0	-	> 0.01 - < 0.06	GHS07 Warning	Skin Sens. 1	H317
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	55965-84-9	-	-	> 0.0015 - < 0.0025	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
Titanium dioxide*	13463-67-7	236-675-5	01-2119489379-17-0014	> 1 - ≤ 10	-	not classified	-
Calcium carbonate*	1317-65-3	215-279-6	-	> 40 - < 50	-	not classified	-
Inorganic natural minerals*	-	310-127-6	-	1 - < 5	GHS08 Warning	STOT RE 2	H373
Terbutryn*	886-50-0	212-950-5	-	> 0.02 - < 0.03	GHS07 GHS09 Warning	Acute Tox. 4 Aquatic Acute 1 M = 10 Aquatic Chronic 1 M = 10	H302 H400 H410

Zinc oxide Index number: 030-013-00-7	1314-13-2	215-222-5	01-2119463881-32	> 0.01 - < 0.03	GHS09 Warning	Aquatic Acute 1 M = 1 Aquatic Chronic 1 M = 1	H400 H410
Pyrithione zinc 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
2-Octyl-2H-isothiazol-3-one Index number: 613-112-00-5	26530-20-1	247-761-7	-	> 0.005 – < 0.008	GHS06 GHS05 GHS09 Danger	Acute Tox. 2 Acute Tox. 3 Acute Tox. 3 Skin Corr. 1 Eye Dam. 1 Skin Sens.1A Aquatic Acute 1 M = 100 Aquatic Chronic 1 M = 100	H330 H311 H301 H314 H318 H317 H400 H410 EUH071
2-Aminoethanol** Index number: 603-030-00-8	141-43-5	205-483-3	01-2119486455-28	> 0.01 - < 0.1	GHS05 GHS07 Danger	Acute Tox. 4 Acute Tox. 4 Acute Tox. 4 Skin Corr.1B	H332 H312 H302 H314

*: Classification specified by the manufacturer; the substance is not listed in Annex VI of the Regulation (EC) No 1272/2008.
**: Substance having occupational exposure limit value.

Pyrithione zinc (CAS: 13463-41-7):
inhalation: ATE= 0,14 mg/l (dust or mist)
oral: ATE = 221 mg/kg bw

2-Octyl-2H-isothiazol-3-one (CAS: 26530-20-1):
inhalation: ATE = 0,27 mg/l (dust or mist)
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 %

2-Aminoethanol (CAS: 141-43-5):
STOT SE 3; H335: C ≥ 5 %

Inorganic natural minerals: The product contains 1-10% by weight of respirable quartz (CAS: 14808-60-7).

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: .

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

INHALATION:

Measures:

- No risk of inhalation.
- If inhalation does occur (e.g. spray application), take the victim to fresh air, place them in a calm environment and loosen tight clothing.
- In case of symptoms/complaints, obtain medical help.

SKIN CONTACT:

Measures:

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

EYE CONTACT:

Measures:

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

Choose extinguishing media appropriate for local environment and conditions.
Water spray, water mist (only for large spread, for cooling surface), alcohol resistant foam, extinguishing powder, carbon dioxide.

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:**

Act 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 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 of according to local regulations.

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, if it can be done without risk of personal injury.
Ventilate the 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:**

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 5.3, 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.
Drying plaster should be protected from direct sunlight, temperatures above 30 °C, draughts, frost and rain.
Wash tools and mixing container immediately after use, as the product can only be removed mechanically. It is forbidden to re-mix the mixed product or reuse the cured waste product!

Technical measures:

Do not use indoors without ventilation.
Ensure adequate ventilation/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 meet the general requirements for storing chemicals.
Store in original, closed and appropriately labelled containers in a dry, well-ventilated place away from direct sunlight, children, food and animal feed.
In case of accidental damage, separate the damaged container immediately and process it as quickly as possible.
Ideal storage and use temperature: 5-25 °C.
Sensitive to frost!
Shelf life: 12 months from the date of manufacture.
Incompatible materials: See Section 10.5.
Packaging material: No special prescriptions.

7.3. **Specific end use(s):**

Outdoor silicone-based wall paint.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. **Control parameters:**

Occupational exposure limit values (Commission Directive (EC) No 2000/39 of 8 June 2000):
2-Aminoethanol (CAS: 141-43-5): 8 hours: 2.5 mg/m³, 1 ppm; Short term: 7.6 mg/m³, 3 ppm (Notation: skin)

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	no data	no data	no data
Worker	Local	no data	no data	no data	no data	no data	no data
	Systemic	no data	no data	no data	no data	no data	no data

PNEC values		
Compartment	Value	Note(s)
Freshwater	no data	no notes
Marine water	no data	no notes
Freshwater sediment	no data	no notes
Marine water sediment	no data	no notes
Sewage Treatment Plant (STP)	no data	no notes
Intermittent release	no data	no notes
Secondary poisoning	no data	no notes
Soil	no data	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.
Ventilation should be provided during preparation, application and drying.
These specifications apply to normal activities carried out under normal conditions of use and for the intended purpose. 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.

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).
    The glove material should be impermeable and resistant to the product.
    Due to missing tests no recommendation to the glove material can be given for the product.
    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.
    As the product is a mixture of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked before use.
    The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
    b. **Other:** Use appropriate protective clothing.
3. **Respiratory protection:** In open spaces or with adequate ventilation, respiratory protection is not necessary.
If ventilation is not adequate or if a spray gun is used, appropriate respiratory protection is required.
Do not breathe in any fumes, smoke, sprays 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.

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 applicable
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	soluble no data*
14.	Partition coefficient n-octanol/water (log value)	not applicable
15.	Vapour pressure	not relevant
16.	Density and/or relative density	1.57 g/cm^3 (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:

No further data available or not applicable for the product.

9.2.2. Other safety characteristics:

Dynamic viscosity: 18,000 – 400,000 cP (20 °C)
VOC: <40 g/l

*: 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:

Protect from frost.

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:
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 corrosion/irritation:
OECD 404 (rabbit): corrosive.
Serious eye damage/irritation:
OECD 405 (rabbit): serious eye damage
Respiratory or skin sensitization:
OECD 406 (guinea pig): sensitizing.
Tetrahydro-1,3,4,6-tetrakis(hydroxymethyl)imidazo[4,5-d]imidazole-2,5(1H,3H)-dione (CAS: 5395-50-6):
Respiratory or skin sensitization:
OECD 406 (guinea pig): sensitizing.
Titanium dioxide (CAS: 13463-67-7):
Acute toxicity:
LD50 (oral, rat): >5000 mg/kg bw
LC50 (inhalative): >6.82 mg/l/4h
No aspiration hazard related to inhalation.
Quartz:
Mutagenicity:
The genotoxic and mutagenic effects of quartz are mainly seen in inflammatory processes. Respirable quartz did not show significant HPRT mutations in epithelial cells in the lungs of rats, in vitro.
Carcinogenicity:
For respirable crystalline quartz, an excess risk of lung cancer was only observed in occupations with high exposure. The high risk of lung cancer is limited to subjects with silicosis.
STOT-repeated exposure:
Prolonged exposure in dust containing respirable crystalline silica can cause silicosis, nodular pulmonary fibrosis, which is caused by deposition of fine-grained respirable crystalline silica in the lungs.
Calcium carbonate (CAS: 1317-65-3):
Acute toxicity:
LD50 (oral, rat): >5000 mg/kg
Terbutryn (CAS: 886-50-0):
LC50 (inhalation, dust, mist, rat): >8 g/m³, 4h
LD50 (dermal, rabbit): >2000 mg/kg
LD50 (oral, female, male rat): 2045 mg/kg
LD50 (oral, female rat): 1000 - 1470 mg/ kg
Senzitizing:
Skin (rabbit) : not senzitizing.
Potential chronic health effects:
NOAEL: (sub chronic, dermal, rabbit): 1000 mg/kg
NOAEL: (sub chronic, dermal, rabbit): >1000 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

LC50 (inhalation, dust, mist, rat): 0.61 mg/l, 4h
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
LC50 (inhalative, dust/mist, rat): 0,58 mg/l/4h
LC50 (inhalative, dust/mist, rat): 0,76 mg/l/4h
LD50 (dermal, rabbit): 311 mg/kg
LD50 (dermal, rabbit): >2000 mg/kg
LD50 (oral, rat): 550 mg/kg
LD50 (oral, rat, male/female): 318-324 mg/kg
Corrosion/irritation:
Skin – serious irritant substance (rabbit)
Eyes – serious irritant substance (rabbit, 100 mg)
Senzitizing:
Skin (mouse): causes sensibilization.
2-Aminoethanol (CAS: 141-43-5):
LD50 (oral, rat): 1089 mg/kg
LD50 (dermal, rat): 2504 mg/kg
LC50 (inhalative, rat): 1.48 mg/l/4h

11.1.3. Information on likely routes of exposure:
Ingestion, inhalation, skin contact, eye contact.

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:
Tetrahydro-1,3,4,6-tetrakis(hydroxymethyl)imidazo[4,5-d]imidazole-2,5(1H,3H)-dione (CAS: 5395-50-6):
EC50 (Desmodesmus subspicatus): 8.5 mg/l/72h (OECD 201)
EC50 (Daphnia magna): 38.9 mg/l/48h (OECD 202)
LC50 (Brachydanio rerio): 17.6 mg/l/96h (OECD 203)
NOEC (Daphnia magna): 11.2 mg/l/21 nap (OECD 211)
NOEC (algae): 3.93 mg/l/72h (OECD 201)
Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) (CAS: 55965-84-9):
EC50 (Pseudokirchneriella subcapitata): 0.048 mg/l/72h (OECD 201)
EC50 (Daphnia magna): 0.1 mg/l/48h (OECD 202)
EC50 (Skeletonema costatum): 0.0052 mg/l/48h (ISO 10253)
LC50 (Onchorhyncus mykiss): 0.22 mg/l/96h (OECD 203)
NOEC (Skeletonema costatum): 0.00064 mg/l/48h (ISO 10253)
NOEC (Daphnia magna): 0.004 mg/l/21 nap (OECD 211)
NOEC (Onchorhyncus mykiss): 0.098 mg/l/28 days (OECD 215)
NOEC (Pseudokirchneriella subcapitata): 0.0012 mg/l/72h (OECD 201)

Toxicity to organisms in active sludge:
EC50: 7.92 mg/l/3h (OECD 209)
EC20: 0.97 mg/l/3h (OECD 209)
Titanium dioxide (CAS: 13463-67-7):
LC50 (Danio rerio): >10 mg/l/48h
NOEC (Danio rerio): ≥ 10000 mg/l/5d
EC50 (Daphnia magna): 7.9 mg/l/96h
EC50 (Daphnia magna): 0.46 mg/l/21d
Calcium carbonate (CAS: 1317-65-3):
LC50 (fish. Oncorhynchus mykiss): 10000 mg/l/96h
EC50 (Daphnia magna): >1000 mg/l/48h
EC50 (Desmodesmus subspicatus): >200 mg/l/72h
Terbutryn (CAS: 886-50-0):
EC50 (Selenastrum capricornutum): 0.013 mg/l/168h
EC50 (Daphnia): 2.66 mg/l/48h
LC50 (Lepomis machrochiris): 1.3 mg/l/96h
LC50 (fish): 1.1 mg/l/96h
NOEC (Daphnia magna): 1.3 mg/l/21d
NOEC (Pimephales promelas): 0.84 mg/l/35d
NOEC (Oncorhynchus mykiss): 0.01 mg/l/21d
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/72h, freshwater
LC50 (Daphnia magna): 98 µg/l/48h, freshwater
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 (Daphnia): 0.32 mg/l/48h
EC50 (Daphnia magna): 107 ppb/48h (freshwater)
LC50 (fish): 0.18 mg/l/96h
LC50 (fish): 0.047 mg/l/96h
NOEC (Daphnia magna): 74 ppb/21d (marine water)
NOEC (Pimephales promelas): 8.5 ppb/35d
2-Aminoethanol (CAS: 141-43-5):
LC50 (Cyprinus caprio): 349 mg/l
EC50 (Daphnia magna): 65 mg/l
EC50 (active sludge): >1000 mg/l

12.2. **Persistence and degradability:**

Information about the components:
Tetrahydro-1,3,4,6-tetrakis(hydroxymethyl)imidazo[4,5-d]imidazole-2,5(1H,3H)-dione (CAS: 5395-50-6):
Rapid degradability of organic substances:
OECD 301 A DOC Die-Away-Test: >70 %
Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) (CAS: 55965-84-9):
Rapid degradability of organic substances:
OECD 301 D Closed-Bottle-Test: >60 %
OECD 308 Simulation Biodegradation Aqu Sed System: 1.82-1.92 days
Behavior in wastewater treatment plants:
OECD 302 B Zahn-Wellens Test: 100 %
OECD 303 Active sludge units: >80 %
Terbutryn (CAS: 886-50-0):
Not readily degradable.
Pyrithione zinc (CAS: 13463-41-7):
Readily degradable.

12.3. **Bioaccumulative potential:**

Information about the components:
Tetrahydro-1,3,4,6-tetrakis(hydroxymethyl)imidazo[4,5-d]imidazole-2,5(1H,3H)-dione (CAS: 5395-50-6):
OECD 107 LogKow (Shake Flask Method): 2 (n-octanol/water)
BCF: 1.41 (calculated)

Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) (CAS: 55965-84-9):
BCF: 3.16 (calculated)
OECD 117 LogKow (HPLC method): ≤0,71 (n-octanol/water)
Titanium dioxide (CAS: 13463-67-7):
BAF: 19 - 208 L/kg
Terbutryn (CAS: 886-50-0):
LogPow: 3.66, potential: low
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
2-Aminoethanol (CAS: 141-43-5):
Log Pow: -1,91

12.4. **Mobility in soil:**
Information about the components:
Titanium dioxide (CAS: 13463-67-7):
Log Kp: 4.61 L/kg
Prevent from entering into soil, groundwater or sewage systems.
2-Aminoethanol (CAS: 141-43-5):
Log Koc: 1,17 (estimated value)

12.5. **Results of PBT and vPvB assessment:**
Based on the available data, the mixture does not contain any ingredient meeting the criteria for classification as 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
*: 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)

The mixture contains substances listed in Annex XIV of Regulation (EC) No 1907/2006 (REACH) (List of substances subject to authorisation):
Pyrithione zinc (CAS: 13463-41-7):
Conditions of restriction: Entry 30 - Reproductive toxicants

Treated article containing the following biocidal active substance 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), 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), 1,2-benzisothiazol-3(*2H*)-one (CAS:2634-33-5), 2-Methylisothiazol-3(*2H*)-one (CAS: 2682-20-4); Bronopol (CAS: 52-51-7).

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.
H312 – Harmful 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.
H332 – Harmful if inhaled.
H335 – May cause respiratory irritation.
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>*.
H373 – May cause 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.

Safety data sheet was prepared by:
MSDS-Europe
International branch of ToxInfo Kft.

Professional help regarding the explanation of the safety data sheet:
+36 70 335 8480; info@msds-europe.com
www.msds-europe.com