

SAFETY DATA SHEET

Accordance with REACH Regulation (EC) No. 1907/2006 and Commission Regulation (EU) 2020/878

Creation / update date: 08-04-2022

Version No. 1

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

1.1. *PRODUCT IDENTIFIER*

Product name:

COOLTOP

Product code: SPC 32309-C

UFI: xxxx-xxxx-xxxx-xxxx

1.2. *RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND USES ADVISED AGAINST*

CoolTop is a water-based coating designed for thermal insulation.

1.3. *DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET*

SeraPlus SA, Industriestrasse 47, CH-6300 Zug

Phone No.: +48 21 903 40 84, Fax No.: +48 21 903 32 65

Product information (during working hours): +48 21 903 40 84

Person responsible for developing the safety data sheet: kch@farbykabe.pl

1.4. *EMERGENCY TELEPHONE NUMBER*

SECTION 2: HAZARDS IDENTIFICATION

2.1. *CLASSIFICATION OF THE SUBSTANCE OR MIXTURE*

Classification according to Regulation (EC) No 1272/2008

Skin Sens. 1A, Skin Sensitization - Category 1A

H317 May cause an allergic skin reaction

2.2. *LABEL ELEMENTS*

Hazard pictogram(s):



Signal word(s): Warning

Hazard-determining components of labeling: Fatty acids, C18, unsatd., dimers, reaction products with N,N-dimethyl-1,3-propanediamine and 1,3-propanediamine; 1,2-benzisothiazol-3(2H)-one; reaction mass of 5-chloro-2-methyl-1,2-thiazol-3(2H)-one and 2-methyl-1,2-thiazol-3(2H)-one (3:1); 2-methyl-1,2-thiazol-3(2H)-one

Hazard statement(s):

H317 May cause an allergic skin reaction.

EUH211 Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

Precautionary statement(s):

P102 Keep out of reach of children.

P261 Avoid breathing vapours/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P333+P364 If skin irritation or rash occurs: Get medical advice/attention.

P362+P364 Take off contaminated clothing and wash it before reuse.

P501 Dispose of contents/container to specialized units with appropriate environmental protection permits for the purpose of disposal or recovery.

2.3. OTHER HAZARDS

The mixture does not meet the criteria for PBT or vPvB in accordance with the Annex XIII of the REACH Regulation (EC) No. 1907/2006.

The mixture does not contain any endocrine disrupting substances in the amount of $\geq 0.1\%$ by weight.

Pursuant to Directive 2004/42/EC, the product was classified as category A/a - the permissible value of the maximum VOC content is 30 g/l. The product contains less than 30 g/l of VOC.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS
















3.1. SUBSTANCES

Not applicable

3.2. MIXTURES

A mixture of acrylic copolymer dispersion with titanium dioxide, glass filler and auxiliary agents of organic origin.

Hazardous substances included in the product	Content % by weight	Identifiers	Classification according to Regulation (EC) No. 1272/2008
Titanium Dioxide *	8 - <11	CAS No.: 13463-67-7 EC No.: 236-675-5 Index No.: 022-006-00-2	EUH212

		Registration No.: 01-2119489379-17	Substance for which maximum workplace exposure limits are available
Fatty acids, C18-unsatd., dimers, reaction products with N,N-dimethyl-1,3-propanediamine and 1,3-propanediamine	>0,1 - <0,15	CAS No.: 162627-17-0 EC No.: - Index No.: - Registration No.: 01-2119970640-38	 Skin Sens. 1A, H317
1,2-benzisothiazol-3(2H)-one	0,01 - <0,023	CAS No.: 2634-33-5 EC No.: 220-120-9 Index No.: 613-088-00-6 Registration No.: -	 Eye Dam. 1, H318  Acute Tox. 4, H302; Skin Irrit. 2, H315; Skin Sens. 1, H317  Aquatic Acute 1, H400 (M=1) Specific Concentration limits: Skin Sens. 1; H317: C ≥ 0,05 %
Pyrithione zinc	≤0,01	CAS No.: 13463-41-7 EC No.: 236-671-3 Index No.: 613-333-00-7 Registration No.: -	 Acute Tox. 2, H330; Acute Tox. 3, H301  Eye Dam. 1, H318  Repr. 1B, H360D; STOT RE 1, H372  Aquatic Acute 1, H400 (M=1000); Aquatic Chronic 1, H410 (M=10) Estimated Acute Toxicity: - inhalation: ATE = 0.14 mg / L (dusts/mists) - oral: ATE = 221 mg/kg body weight
Reaction mass of 5-chloro-2-methyl-1,2-thiazol-3(2H)-one and 2-methyl-1,2-thiazol-3(2H)-one (3:1)	<0,0015	CAS No.: 55965-84-9 EC No.: - Index No.: 631-167-00-5 Registration No.: -	 Acute Tox. 2, H310, H330; Acute Tox. 3, H301  Skin Corr. 1C, H314; Eye Dam. 1, H318  Skin Sens. 1A, H317  Aquatic Acute 1, H400 (M=100); Aquatic Chronic 1, H410 (M=100) EUH071 Specific Concentration limits: C ≥ 0,6% Skin Corr. 1C, Eye Dam. 1 0,06% ≤ C < 0,6% Skin Irrit. 2, Eye Irrit. 2 C ≥ 0,0015% Skin Sens. 1A
2-methyl-1,2-thiazol-3(2H)-one	<0,0005	CAS No.: 2682-20-4 EC No.: 220-239-6 Index No.: 613-326-00-9 Registration No.: -	 Acute Tox. 2, H330; Acute Tox. 3, H301, H311  Skin Corr. 1B, H314; Eye Dam. 1, H318  Skin Sens. 1A, H317

			 <p>Aquatic Acute 1, H400 (M=10); Aquatic Chronic 1, H410 (M=1) EUH071</p> <p>Specific Concentration limits: C ≥ 0,0015% Skin Sens. 1A</p>
--	--	--	--

The full text of hazard classes and statements are given in section 16.

* On the basis of the manufacturer's declaration, the substance does not meet the criteria for classification as carcinogenic Carc. 2, H351 in accordance with EU regulation 2020/217.

SECTION 4: FIRST AID MEASURES

4.1. DESCRIPTION OF FIRST AID MEASURES

Inhalation poisoning: Avoid breathing spray. In case of symptoms occurs, provide fresh air and consult a doctor.

Eye contamination: Rinse the eye with water, holding the eyelids open. Remove contact lenses, if present, and continue rinsing. If irritation occurs, consult an ophthalmologist.

Skin contamination: Take off contaminated clothing and shoes and wash / launder before reuse. Wash contaminated skin with water with generally available hygiene products (soaps, pastes, etc.). Seek medical attention if persistent irritation or allergic reaction occurs.

Ingestion: Rinse mouth with plenty of water - do not induce vomiting. Consult a physician.

4.2. MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

- consumption may cause irritation of the digestive system;
- contamination of the eyes or skin may cause irritation or an allergic reaction.

4.3. INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

If necessary, provide medical care. Symptomatic treatment.

SECTION 5: FIREFIGHTING MEASURES

5.1. EXTINGUISHING MEDIA

- recommended extinguishing media: water spray, extinguishing powder, alcohol-resistant foam, carbon dioxide, sand;
- unsuitable extinguishing media: water jet, water whip.

5.2. SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

A fire will often produce a thick black smoke. Exposure to combustion products can be a health hazard! Hazardous combustion products: carbon oxides, incompletely burned hydrocarbons.

5.3. ADVICE FOR FIREFIGHTERS

Promptly isolate the area by removing people from the immediate vicinity of the fire. Firefighters should wear appropriate protective devices and individual breathing apparatus with a full-face mask operating under positive pressure. The basic level of protection during chemical accidents is provided by clothing used by firefighters (including helmets, safety shoes and gloves).

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

6.1.1. FOR NON-EMERGENCY PERSONNEL

No action should be taken to put anyone at risk unless properly trained. Evacuate people from surrounding areas, do not touch or walk through spilled material. Avoid breathing spray, use respiratory protection if necessary.

6.1.2. FOR EMERGENCY RESPONDERS

Suitable personal protective equipment (see section 8).

6.2. ENVIRONMENTAL PRECAUTIONS

Prevent large amounts of the mixture from getting into the ground, sewage system, surface and ground waters. In case of contamination, inform local authorities in accordance with legal regulations.

6.3. METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP

Remove wet material with absorbent non-flammable material (e.g. vermiculite, diatomaceous earth, sand). Place the collected material in an appropriately labeled container, and then dispose of in accordance with local regulations. It is best to clean the residues with detergents - do not use solvents.

6.4. REFERENCE TO OTHER SECTIONS

Information on appropriate personal protective equipment is given in section 8. Information on additional waste treatment is given in section 13.

SECTION 7: HANDLING AND STORAGE

7.1. PRECAUTIONS FOR SAFE HANDLING

Tips for safe handling:

- Ensure good ventilation at the workplace.
- Always wash hands after handling.
- No smoking, eating or drinking in areas where the mixture is used.
- Observe precautions stated on label and also industrial safety regulations.
- For personal protection, see section 8.

Precautions for protection against fire:

Keep away from ignition sources – No smoking allowed.

7.2. CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

- Store in tightly closed original packaging.
- Product should be stored in dry and cool place. Avoid frost or high temperature.
- Keep away from strong acids and alkalis.

7.3. SPECIFIC END USE(S)

No data available.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. CONTROL PARAMETERS

Substance	CAS No.:	Control parameters	Value	Legal basis
Titanium Dioxide	13463-67-7			
Austria		TMW	5 mg/m ³ - respirable fraction	Verordnung des Bundesministers für Arbeit über Grenzwerte für Arbeitsstoffe sowie über krebserzeugende und fortpflanzungsgefährdende (reproduktionsstoxische) Arbeitsstoffe
		KZW	10 mg/m ³ - respirable fraction	

			(Grenzwerteverordnung 2021 – GKV)
Belgium	TGG 8hr	10 mg/m ³	Grenswaarden voor beroepsmatige blootstelling
Bulgaria	TWA	10 mg/m ³	НАРЕДБА № 13 ОТ 30 ДЕКЕМВРИ 2003 Г. ЗА ЗАЩИТА НА РАБОТЕЩИТЕ ОТ РИСКОВЕ, СВЪРЗАНИ С ЕКСПОЗИЦИЯ НА ХИМИЧНИ АГЕНТИ ПРИ РАБОТА
Croatia	GVI	10 mg/m ³ - total dust, inhalable particles	Pravilnik o izmjenama i dopunama Pravilnika o zaštiti radnika od izloženosti opasnim kemikalijama na radu, graničnim vrijednostima izloženosti i biološkim graničnim vrijednostima NN 1/2021, (10), pravilnik, 4.1.2021.
	GVI	4 mg/m ³ - respirable dust	
Denmark	GV	6 mg/m ³	Bekendtgørelse om grænseværdier for stoffer og materialer BEK nr 2203 af 29/11/2021
Finland	HTP-arvot 8h	10 mg/m ³	HTP-ARVOT 2020 Haitallisiksi tunnetut pitoisuudet Sosiaali- ja terveystieteiden ministeriön julkaisuja 2020:24
France	VLEP 8hr	10 mg/m ³	Valeurs limites d'exposition professionnelle aux agents chimiques en France (INRS)
Germany	AGW	10 mg/m ³ - inhalable fraction	TRGS 900 Arbeitsplatzgrenzwerte BArBl. Heft 1/2006 S. 41-55 Zuletzt geändert und ergänzt: GMBI 2022, S. 161-162 [Nr. 7] (vom 25.02.2022)
	AGW	1,25 mg/m ³ - respirable fraction	
Ireland	OELV - 8 hrs (TWA)	10 mg/m ³ - inhalable dust	Chemical Agents and Carcinogens Code of Practice 2021
	OELV - 8 hrs (TWA)	4 mg/m ³ - respirable dust	
Latvia	AER 8 st	10 mg/m ³	Darba aizsardzības prasības saskarē ar ķīmiskajām vielām darba vietās Ministru kabineta noteikumi Nr.325 Rīgā 2007.gada 15.maijā (prot. Nr.29 29.§)
Lithuania	IPRV	5 mg/m ³	Lietuvos Respublikos Sveikatos Apsaugos Ministro Ir Lietuvos Respublikos Socialinės Apsaugos Ir Darbo Ministro Įsakymas Dėl Lietuvos Higienos Normos Hn 23:2011 „Cheminių Medžiagų Profesinio Poveikio Ribiniai Dydžiai. Matavimo Ir Poveikio Vertinimo Bendrieji Reikalavimai“ Patvirtinimo 2011 m. rugsėjo 1 d. Nr. V-824/A1-389 Vilnius
Norway	GV	5 mg/m ³	Forskrift om endring i forskrift om tiltaksverdier og grenseverdier for fysiske og kjemiske faktorer i arbeidsmiljøet samt smitterisikogrupper for biologiske faktorer (forskrift om tiltaks- og grenseverdier) FOR-2021-06-28-2248
Poland	NDS	10 mg/m ³ - inhalable fraction	Rozporządzenie Ministra Rodziny, Pracy i Polityki Społecznej z dnia 12 czerwca 2018 r. w sprawie najwyższych dopuszczalnych stężeń i natężeń czynników szkodliwych dla zdrowia w środowisku pracy
Romania	VLM – 8h	10 mg/m ³	Valori-limită obligatorii de expunere profesională la agenți chimici (înlocuiește Anexa nr.1 din HG nr.1218/2006, cu modificările și completările ulterioare)
	VLM – 15min	15 mg/m ³	

Slovakia	NPEL- priemerný	5 mg/m ³	Nariadenie vlády Slovenskej republiky o ochrane zamestnancov pred rizikami súvisiacimi s expozíciou chemickým faktorom pri práci. Nariadenie vlády č. 355/2006 Z. z. (v znení č)
Spain	VLA-ED	10 mg/m ³	Límites de exposición profesional para agentes químicos en España 2021
Sweden	NGV	3 mg/m ³ - total dust	Hygieniska gränsvärden. Arbetsmiljöverkets föreskrifter och allmänna råd om hygieniska gränsvärden AFS 2018:1 (Ändringar införda till och med den 22 september 2021.)
Switzerland	MAK-Wert	3 mg/m ³ - respirable dust	Schweiz. Grenzwerte am Arbeitsplatz
United Kingdom	TWA	10 mg/m ³ - inhalable dust	EH40/2005 Workplace exposure limits (Fourth Edition 2020)
	TWA	4 mg/m ³ - respirable dust	

8.2. EXPOSURE CONTROLS

8.2.1. APPROPRIATE ENGINEERING CONTROLS

Ensure proper ventilation of the room while working with the mixture, as well as personal protective equipment. Avoid inhaling dust/spray/mist. Avoid skin and eyes contamination. Don't eat, drink or smoke during use. Use personal protective equipment that is clean and has been properly maintained. Store personal protective equipment in a clean place, away from the work area. Remove and wash contaminated clothing before reusing.

8.2.2. INDIVIDUAL PROTECTION MEASURES, SUCH AS PERSONAL PROTECTIVE EQUIPMENT

Respiratory protection:

In case of good ventilation, no protective equipment is needed. In the event of inadequate ventilation of the room or during works where there is a risk of inhalation of sprayed liquid or dust, it is recommended to use respiratory protection measures. Recommended: dust half-mask class FFP2 according to EN 149.

Hand protection:

Wear suitable protective gloves in the event of prolonged or repeated skin contact accordance with EN 374. Gloves protecting against mechanical damage are not suitable. Use protective hand cream as a precaution.

Type of gloves recommended:

- Natural latex
- Nitril rubber (butadiene-acrylonitril copolymer rubber (NBR))
- PVC (polyvinyl chloride)
- Butyl Rubber (Isobutylene-isoprene copolymer)

The choice of the right gloves is not only dependent on the material, but also on further quality characteristics. The data provided by the gloves suppliers regarding permeability and breakthrough must be followed.

Eye and face protection:

Wear safety goggles in accordance with standard EN 166. Eye wash device should be available at the workplace.

Body protection:

Wear appropriate protective clothing. Work clothing worn by personnel shall be laundered regularly. After contact with the product, all parts of the body that have been soiled must be washed.

8.2.3. ENVIRONMENTAL EXPOSURE CONTROLS

Prevent large amounts of the mixture from getting into reservoirs, water courses, sewage systems and soil. In case of contamination, inform local authorities in accordance with legal regulations.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

a) **Physical state:** liquid

b) **Colour:** white

c) **Odour:** weak

d) **Melting point/freezing point:** no data available

e) **Boiling point or initial boiling point and boiling range:** no data available

f) **Flammability:** no data available

g) **Lower and upper explosion limit:** no data available

h) **Flash point:** not applicable

i) **Auto-ignition temperature:** not applicable

j) **Decomposition temperature:** not applicable

k) **pH:** no data available

l) **Kinematic viscosity:** no data available

m) **Solubility:** water-soluble

n) **Partition coefficient n-octanol/water (log value):** not applicable

o) **Vapour pressure:** no data available

p) **Density and/or relative density:** 0,65 – 0,75 g/cm³

q) **Relative vapour density:** no data available

r) **Particle characteristics:** not applicable

9.2. OTHER INFORMATION

9.2.1. INFORMATION WITH REGARD TO PHYSICAL HAZARD CLASSES

Not applicable

9.2.2. OTHER SAFETY CHARACTERISTICS

No data available

SECTION 10: STABILITY AND REACTIVITY

10.1. REACTIVITY

No data available

10.2. CHEMICAL STABILITY

This mixture is stable under the recommended handling and storage conditions.

10.3. POSSIBILITY OF HAZARDOUS REACTIONS

Dangerous reactions are unknown.

10.4. CONDITIONS TO AVOID

Avoid frost and high temperature.

10.5. INCOMPATIBLE MATERIALS

Keep away from strong acids and alkalis.

10.6. HAZARDOUS DECOMPOSITION PRODUCTS

No decomposition when used as directed. Harmful products such as carbon monoxide, carbon dioxide, nitrogen oxides and smoke are formed at high temperatures.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. INFORMATION ON HAZARD CLASSES AS DEFINED IN REGULATION (EC) NO 1272/2008

The product has not been tested. The classification was made on the basis of the content of individual components and information provided by suppliers.

Hazard class	Category	Effect
Acute toxicity	-	Based on the available information, the mixture does not meet the criteria for classification.
Skin corrosion/irritation	-	Based on the available information, the mixture does not meet the criteria for classification.
Serious eye damage/irritation	-	Based on the available information, the mixture does not meet the criteria for classification.
Respiratory or skin sensitisation	1A	The mixture is classified as Skin Sens. 1A, H317 May cause an allergic skin reaction. Classification is based on the content of: Fatty acids, C18, unsatd., dimers, reaction products with N,N-dimethyl-1,3-propanediamine and 1,3-propanediamine. Additionally, the mixture contains substances whose contents meet the requirements of EUH208 labeling: 1,2-benzisothiazol-3(2H)-one; reaction mass of 5-chloro-2-methyl-1,2-thiazol-3(2H)-one and 2-methyl-1,2-thiazol-3(2H)-one (3:1); 2-methyl-1,2-thiazol-3(2H)-one.
Germ cell mutagenicity	-	Based on the available information, the mixture does not meet the criteria for classification.
Carcinogenicity	-	Based on the available information, the mixture does not meet the criteria for classification. The manufacturer decided to use the additional warning phrase EUH211, despite the fact that the mixture contains <1% titanium dioxide particles with an aerodynamic diameter of $\leq 10 \mu\text{m}$.
Reproductive toxicity	-	Based on the available information, the mixture does not meet the criteria for classification.
STOT - single exposure	-	Based on the available information, the mixture does not meet the criteria for classification.
STOT - repeated exposure	-	Based on the available information, the mixture does not meet the criteria for classification.
Aspiration hazard	-	Based on the available information, the mixture does not meet the criteria for classification.

11.1.1. MIXTURES

Titanium Dioxide CAS No.: 13463-67-7		
Hazard class	Category	Effect
Acute toxicity: - via dermal route - via inhalation route - via oral route	- - -	No data available LC50 > 6,82mg/L (MMAD=1.55 µm, GSD=1.70 µm) LD50 > 5000 mg/kg Based on the available data, the classification criteria are not met.
Skin corrosion/irritation	-	Based on the available data, the classification criteria are not met.
Serious eye damage/irritation	-	Based on the available data, the classification criteria are not met.
Respiratory or skin sensitisation	-	Based on the available data, the classification criteria are not met.
Germ cell mutagenicity	-	Based on the available data, the classification criteria are not met.
Carcinogenicity	-	According to the EU regulation 2020/217 titanium dioxide, [in powder form containing 1% or more of particles with aerodynamic diameter ≤ 10 µm] is classified as carcinogenic Carc. 2, H351. According to the manufacturer's declaration, the used titanium dioxide does not meet the classification criteria.
Reproductive toxicity	-	Based on the available data, the classification criteria are not met.
STOT - single exposure	-	Based on the available data, the classification criteria are not met.
STOT - repeated exposure	-	Based on the available data, the classification criteria are not met.
Aspiration hazard	-	Based on the available data, the classification criteria are not met.
Fatty acids, C18-unsatd., dimers, reaction products with N,N-dimethyl-1,3-propanediamine and 1,3-propanediamine CAS No.: 162627-17-0		
Hazard class	Category	Effect
Acute toxicity: - via dermal route - via inhalation route - via oral route	- - -	No data available No data available LD50 > 10000 mg/kg bw (OECD 420) Based on the available data, the classification criteria are not met.
Skin corrosion/irritation	-	Based on the available data from studies on rabbits (OECD 404), the classification criteria are not met.
Serious eye damage/irritation	-	Based on the available data from studies on rabbits (OECD 405), the classification criteria are not met.
Respiratory or skin sensitisation	1A	On the basis of LLNA studies conducted in mice (OECD 429), the substance may cause sensitization by skin contact - it has been classified as Skin Sens. 1A, H317.
Germ cell mutagenicity	-	Ames test (OECD 471) - negative Chromosome aberration test in vitro (OECD 473) - negative In vitro mammalian cell gene mutation test (mouse lymphoma, OECD 476) - negative Based on the available data, the classification criteria are not met.
Carcinogenicity	-	Based on the available data, the classification criteria are not met.
Reproductive toxicity	-	Based on the available data, the classification criteria are not met.
STOT - single exposure	-	Based on the available data, the classification criteria are not met.
STOT - repeated exposure	-	Based on the available data, the classification criteria are not met.
Aspiration hazard	-	Based on the available data, the classification criteria are not met.
1,2-benzisothiazol-3(2H)-one CAS No.: 2634-33-5		
Hazard class	Category	Effect
Acute toxicity:		

- via dermal route	-	LD50 > 2000 mg/kg bw (OECD 402, rat)
- via inhalation route	-	No data available
- via oral route	4	LD50 = 490 mg/kg bw (OECD 401, rat) Based on the available data, the substance was classified as Acute Tox. 4, H302.
Skin corrosion/irritation	2	Based on the performed tests (EPA OPP 81-5 and OECD404, rabbit), the substance was not considered to be irritating to rabbit skin. However, it has been classified as Skin Irrit. 2, H315.
Serious eye damage/irritation	1	On the basis of the conducted tests (OECD 437), the potential of the substance to be acute irritating to eyes was found. On this basis, the substance was classified as Eye Dam. 1, H318.
Respiratory or skin sensitisation	1	Based on the in vivo skin sensitisation study results (US EPA Guideline OPP 81-6, guinea pig) the substance was classified as Skin Sens. 1, H317.
Germ cell mutagenicity	-	Based on the available data, the classification criteria are not met.
Carcinogenicity	-	Based on the available data, the classification criteria are not met.
Reproductive toxicity	-	Based on the available data, the classification criteria are not met.
STOT - single exposure	-	Based on the available data, the classification criteria are not met.
STOT - repeated exposure	-	Based on the available data, the classification criteria are not met.
Aspiration hazard	-	Based on the available data, the classification criteria are not met.

Pyrrithione zinc CAS No.: 13463-41-7

Hazard class	Category	Effect
Acute toxicity:		
- via dermal route	-	LD50 > 2000 mg/kg bw (rat, EPA OPP 81-2)
- via inhalation route	2	ATE = 0,14 mg/L (dusts/mists)
- via oral route	3	ATE = 221 mg/kg bw The substance has a harmonized classification, where it was classified as: Acute Tox.2, H330; Acute Tox. 3, H301.
Skin corrosion/irritation	-	Based on the available data, the classification criteria are not met.
Serious eye damage/irritation	1	Based on the results of studies carried out on rabbits (OECD 405), the substance was classified as causing serious eye damage Eye Dam. 1, H318.
Respiratory or skin sensitisation	-	No sensitization was found in a study carried out on mice (OECD 429).
Germ cell mutagenicity	-	Based on the available data, the classification criteria are not met.
Carcinogenicity	-	Based on the available data, the classification criteria are not met.
Reproductive toxicity	1B	The substance has a harmonized classification, where it was classified as: Repr. 1B, H360D May damage the unborn child.
STOT - single exposure	-	Based on the available data, the classification criteria are not met.
STOT - repeated exposure	1	The substance has a harmonized classification, where it was classified as: STOT RE 1, H372.
Aspiration hazard	-	Based on the available data, the classification criteria are not met.

Reaction mass of 5-chloro-2-methyl-1,2-thiazol-3(2H)-one and 2-methyl-1,2-thiazol-3(2H)-one (3:1) CAS No.: 55965-84-9

Hazard class	Category	Effect
Acute toxicity:		
- via dermal route	2	LD50 > 141 mg/kg bw (OECD 402, rat)
- via inhalation route	2	LC50/4h = 0,171 mg/L (OECD 403, rat)
- via oral route	3	LD50 = 66 mg/kg bw (OECD 401, rat) The mixture has a harmonized classification where it was classified as: Acute Tox. 2, H310, H330; Acute Tox. 3, H301.

Skin corrosion/irritation	1C	The mixture has a harmonized classification, where it was classified as: Skin Corr. 1C, H314.
Serious eye damage/irritation	1	The mixture has a harmonized classification, where it was classified as: Eye Dam. 1, H318.
Respiratory or skin sensitisation	1A	The mixture has a harmonized classification, where it was classified as: Skin Sens. 1A, H317
Germ cell mutagenicity	-	Based on the available data, the classification criteria are not met.
Carcinogenicity	-	Based on the available data, the classification criteria are not met.
Reproductive toxicity	-	Based on the available data, the classification criteria are not met.
STOT - single exposure	-	Based on the available data, the classification criteria are not met.
STOT - repeated exposure	-	Based on the available data, the classification criteria are not met.
Aspiration hazard	-	Based on the available data, the classification criteria are not met.

2-methyl-1,2-thiazol-3(2H)-one CAS No.: 2682-20-4

Hazard class	Category	Effect
Acute toxicity: - via dermal route - via inhalation route - via oral route	3 2 3	LD50 = 242 mg/kg bw (OECD 402, rat) LC50/4h = 0.11 mg/L (OECD 403, rat, dust/mist) LD50 = 285.5 mg/kg bw (OECD 401, rat) The substance has a harmonized classification, where it was classified as: Acute Tox. 2, H330; Acute Tox. 3, H301, H311.
Skin corrosion/irritation	1B	Studies in rabbits (OECD 404) showed a corrosive effect of the substance. The substance has a harmonized classification, where it was classified as: Skin Corr. 1B, H314.
Serious eye damage/irritation	1	The substance has a harmonized classification, where it was classified as: Eye Dam. 1, H318.
Respiratory or skin sensitisation	1A	Studies with guinea pigs (OECD 406) have shown sensitizing properties. The substance has a harmonized classification, where it was classified as: Skin Sens. 1A, H317.
Germ cell mutagenicity	-	Based on the available information, the substance does not meet the criteria for classification.
Carcinogenicity	-	Based on the available information, the substance does not meet the criteria for classification.
Reproductive toxicity	-	Based on the available information, the substance does not meet the criteria for classification.
STOT - single exposure	-	Based on the available information, the substance does not meet the criteria for classification.
STOT - repeated exposure	-	Based on the available information, the substance does not meet the criteria for classification.
Aspiration hazard	-	Based on the available information, the substance does not meet the criteria for classification.

11.2. INFORMATION ON OTHER HAZARDS

No data available

SECTION 12: ECOLOGICAL INFORMATION**12.1. TOXICITY**

The product is not classified as hazardous to the environment. There are no data with experimentally confirmed data for the product. Do not allow leakage to the soil, water reservoirs, groundwater or sewage system.

Toxicity of the mixture components:
Titanium Dioxide CAS No.: 13463-67-7
Short-term toxicity to fish: LC50/96h > 100 mg/L (Oncorhynchus mykiss)
Long-term toxicity to fish: NOEC ≥ 160 mg/L
Short-term toxicity to aquatic invertebrates: EC/LC50 > 1000 mg/L (freshwater) and > 10,000 mg/L (marine)
Long-term toxicity to aquatic invertebrates: EC50: > 10 mg/L (Daphnia magna)
Toxicity to aquatic algae and cyanobacteria: NOEC ≥ 100 mg/L (freshwater) and ≥ 5600 mg/L (saltwater)
Toxicity to microorganisms: NOEC/3h ≥ 1000 mg/L
Terrestrial toxicity: Toxicity data from standard toxicity tests indicate that micro- and nanosized TiO ₂ materials are not toxic to soil organisms including microbes, plants and invertebrates up to at least 1000 mg/kg dw soil.
Fatty acids, C18-unsatd., dimers, reaction products with N,N-dimethyl-1,3-propanediamine and 1,3-propanediamine CAS No.: 162627-17-0
Short-term toxicity to fish: LC50/48h > 150 mg/L (Leuciscus idus)
Short-term toxicity to aquatic invertebrates: EL50/48h > 100 mg/L (Daphnia magna)
Long-term toxicity to aquatic invertebrates: NOELR/21d > 100 mg/L (Daphnia magna)
Toxicity to aquatic algae and cyanobacteria: ErL50/72h > 100 mg/L (Pseudokirchneriella subcapitata)
Toxicity to microorganisms: IC50/16h > 430 mg/L (Pseudomonas putida)
1,2-benzisothiazol-3(2H)-one CAS No.: 2634-33-5
Short-term toxicity to fish: LC50/96h = 2.18 mg/L (freshwater)
Short-term toxicity to aquatic invertebrates: EC50/48h = 2.9 mg/L (freshwater)
Toxicity to aquatic algae and cyanobacteria: EC50 = 110 µg/L; EC10 or NOEC = 40.3 µg/L (freshwater)
Toxicity to microorganisms: EC10 or NOEC = 10.3 mg/L
Toxicity to soil macroorganisms except arthropods: Short-term EC50 or LC50 = 410.6 mg/kg soil dw; Long-term EC10, LC10 or NOEC = 234.5 mg/kg soil dw
Toxicity to terrestrial plants: Short-term EC50 or LC50 = 200 mg/kg soil dw; Long-term EC10, LC10 or NOEC = 30 mg/kg soil dw
Toxicity to soil microorganisms: Short-term EC50 or LC50 = 811.5 mg/kg soil dw; Long-term EC10, LC10 or NOEC = 263.7 mg/kg soil dw
Pyrithione zinc CAS No.: 13463-41-7
Short-term toxicity to fish: LC50 = 0.003 mg/L (for freshwater fish), LC50 = 0.4 mg/L (for marine fish)
Short-term toxicity to aquatic invertebrates: EC50 = 0.008 mg/L (for freshwater invertebrates), EC50 = 0.006 mg/L (for marine invertebrates)
Toxicity to aquatic algae and cyanobacteria: EC50 = 0.003 mg/L (freshwater algae), EC50 = 0.001 mg/L (marine algae)
Toxicity to microorganisms: EC50 = 2.4 mg/L, EC10 or NOEC = 0.1 mg/L
Reaction mass of 5-chloro-2-methyl-1,2-thiazol-3(2H)-one and 2-methyl-1,2-thiazol-3(2H)-one (3:1) CAS No.: 55965-84-9
Acute toxicity to fish: LC50/96h = 0.22 mg/L (Oncorhynchus mykiss, OECD 203)
Acute toxicity to saltwater fish: LC50/96h = 0.48 mg/L (Cyprinodon variegatus, USEPA FIFRA 72-4)
Chronic toxicity to fish: NOEC/28d = 0.098 mg/L (Oncorhynchus mykiss, OECD 215)
Acute toxicity to freshwater invertebrates: EC50/48h = 0.10 mg/L (Daphnia magna, OECD 202)
Acute toxicity to salt water invertebrates: LC50/96h = 0.33 mg/L (Mysidopsis bahia, USEPA FIFRA 72-3)
Chronic toxicity to freshwater invertebrates: NOEC/21d = 0.0036 mg/L (Daphnia magna, OECD 202)
Toxicity to freshwater algae: ErC50 = 53.5*10 ⁻³ , NOErC = 1.16*10 ⁻³ (Pseudokirchneriella Subcapitata, OECD 201)
Toxicity to salt water algae: ErC50 = 5.2*10 ⁻³ , NOErC = 0.49*10 ⁻³ (Skeletonema costatum, OECD 201)
Sediment toxicity: NOEC/28d = 7.03 mg/kg (Chironomus riparius, OECD 218)
2-methyl-1,2-thiazol-3(2H)-one CAS No.: 2682-20-4
Short-term toxicity to fish: LC50/96h = 4.77 mg/L (Oncorhynchus mykiss, OECD 203)
Short-term toxicity to aquatic invertebrates: EC50/48h = 0.85 mg/L (Daphnia magna, OECD 202)
Toxicity to aquatic algae and cyanobacteria: EC50/96h = 0.069 mg/L (Skeletonema costatum, OECD 201)
Toxicity to microorganisms: EC50/3h = 41 mg/L (OECD 209)

12.2. PERSISTENCE AND DEGRADABILITY

Fatty acids, C18-unsatd., dimers, reaction products with N,N-dimethyl-1,3-propanediamine and 1,3-propanediamine CAS No.: 162627-17-0
Not readily biodegradable (OECD 301)

1,2-benzisothiazol-3(2H)-one CAS No.: 2634-33-5
OECD 302 B Zahn-Wellens Test ~ 90% (sewage organisms) S 3509 OECD 303 A: Activated Sludge Units > 70% (sewage organisms) S 978
Pyrrhione zinc CAS No.: 13463-41-7
OECD 308 Simulation Biodegradation Aqu Sed System: 0,5 d - S 3418
Reaction mass of 5-chloro-2-methyl-1,2-thiazol-3(2H)-one and 2-methyl-1,2-thiazol-3(2H)-one (3:1) CAS No.: 55965-84-9
The 10-day period criterion is not met. Not readily biodegradable: 62% after 28d (OECD 301B).
2-methyl-1,2-thiazol-3(2H)-one CAS No.: 2682-20-4
Result: 55.8% - Not readily biodegradable (OECD 301 B). The 10-day period criterion is not met.

12.3. BIOACCUMULATIVE POTENTIAL

1,2-benzisothiazol-3(2H)-one CAS No.: 2634-33-5
OECD 305 Bioconcentration factor 6.95 (fish) S 2243 OECD 117 Log Pow partition coefficient (HPL method) 0.7 (n-octanol / water) S 324
Pyrrhione zinc CAS No.: 13463-41-7
Partition coefficient n-octanol/water: log Kow: 1.21 - S 2781 (OECD 107).
Reaction mass of 5-chloro-2-methyl-1,2-thiazol-3(2H)-one and 2-methyl-1,2-thiazol-3(2H)-one (3:1) CAS No.: 55965-84-9
Based on the structure of the molecules CIT and MIT, the BCF were calculated by the model EPIN using the SMILES code as input. EPIWIN estimates of the BCF are 3.16 for both CIT and MIT. Accordingly, none of the two compounds is considered to possess any bioconcentration potential.

12.4. MOBILITY IN SOIL

1,2-benzisothiazol-3(2H)-one CAS No.: 2634-33-5
A study was performed to determine the adsorption / desorption potential of the substance in accordance with OECD Guideline 121. The Soil Adsorption / Desorption Index (log Koc) was estimated by the HPLC simulation procedure. The mean log Koc value for the test substance was 0.97 and it fell within the 95% confidence interval from 0.76 to 1.19.
Reaction mass of 5-chloro-2-methyl-1,2-thiazol-3(2H)-one and 2-methyl-1,2-thiazol-3(2H)-one (3:1) CAS No.: 55965-84-9
log Koc: 0,82 – 1 (OECD 106)

12.5. RESULTS OF PBT AND VPVB ASSESSMENT

This product does not contain any relevant substances that could be considered nuisance, bioaccumulative or toxic (PBT) or very nuisance and very bioaccumulative (vPvB).

12.6. ENDOCRINE DISRUPTING PROPERTIES

The mixture does not contain any endocrine disrupting substances in the amount of $\geq 0.1\%$ by weight.

12.7. OTHER ADVERSE EFFECTS

No data available

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. WASTE TREATMENT METHODS

Proper waste management of the mixture and/or its container must be determined in accordance with Directive 2008/98/EC.

Waste:

Waste management should not endanger human health or harm the environment. Recycle or dispose of waste in compliance with current legislation, preferably via a certified collector or company. Do not contaminate the ground or water with waste, do not dispose of waste into the environment.

Contaminated packaging:

Packaging should be emptied completely (dry, free from loose residues, without deposits). Keep label(s) on container. Packaging must be delivered for reuse or recycling in accordance with applicable local / national laws.

Waste Code:

08 01 12 waste paint and varnish other than those mentioned in 08 01 11

SECTION 14: TRANSPORT INFORMATION

14.1. UN NUMBER OR ID NUMBER

Not applicable

14.2. UN PROPER SHIPPING NAME

Not applicable

14.3. TRANSPORT HAZARD CLASS(ES)

Not applicable

14.4. PACKING GROUP

Not applicable

14.5. ENVIRONMENTAL HAZARDS

Not applicable

14.6. SPECIAL PRECAUTIONS FOR USER

Not applicable

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

- 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)

- COMMISSION REGULATION (EU) 2015/830 amending Regulation (EC) No. 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

- COMMISSION REGULATION (EU) No 453/2010 of 20 May 2010 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

- 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 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC

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

- Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives

- Directive 2004/42/EC of the European Parliament and of the Council of 21 April 2004 on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain paints and varnishes and vehicle refinishing products and amending Directive 1999/13/EC

This product fulfills the permitted European levels of VOC in the ready-to-use product (category A/a) < 30 g/l.

- Commission Decision of 3 May 2000 replacing Decision 94/3/EC establishing a list of wastes pursuant to Article 1(a) of Council Directive 75/442/EEC on waste and Council Decision 94/904/EC establishing a list of hazardous waste pursuant to Article 1(4) of Council Directive 91/689/EEC on hazardous waste (notified under document number C(2000) 1147) (Text with EEA relevance) (2000/532/EC)

15.2. CHEMICAL SAFETY ASSESSMENT

Not performed

SECTION 16: OTHER INFORMATION

The information is prepared based on the current state of knowledge, incl. safety data sheets for raw materials included in the product and relate to the product in the form in which it is used.

Data contained in the Safety Data Sheet should be considered only as an aid to safe handling in transport, distribution, use and storage.

The user bears full responsibility:

- for determining the suitability of the product for specific purposes, and
- resulting from improper use of the information contained in the Safety Data Sheet

16.1. MEANING OF PHRASES USED IN SECTION 3

Acute Tox. 2, Acute Toxicity – Category 2

H310 Fatal in contact with skin

H330 Fatal if inhaled

Acute Tox. 3, Acute Toxicity - Category 3

H301 Toxic if swallowed

H311 Toxic in contact with skin

Acute Tox. 4, Acute Toxicity - Category 4

H302 Harmful if swallowed

Skin Corr. 1, Skin Corrosion – Category 1B, 1C

H314 Causes severe skin burns and eye damage

Skin Irrit. 2, Skin Irritation - Category 2

H315 Causes skin irritation

Skin Sens. 1, 1A, Skin Sensitization - Category 1, 1A

H317 May cause an allergic skin reaction

Eye Dam. 1, Eye Damage - Category 1

H318 Causes serious eye damage

Carc. 2, Carcinogenicity – Category 2

H351 Suspected of causing cancer

Repr. 1B, Reproductive toxicity – Category 1B

H360D May damage the unborn child

STOT RE 1, Specific target organ toxicity - repeated exposure, Category 1

H372 Causes damage to organs through prolonged or repeated exposure

Aquatic Acute 1, Aquatic Acute Toxicity - Category 1

H400 Very toxic to aquatic life

Aquatic Chronic 1, Long-term (chronic) aquatic hazard – Category 1

H410 Very toxic to aquatic life with long-lasting effects

EUH071 Corrosive to the respiratory tract

EUH212 Warning! Hazardous respirable dust may be formed when used. Do not breathe dust.

16.2. *CHANGES MADE IN SAFETY DATA SHEET*

Not applicable

16.3. *ABBREVIATIONS THAT MAY APPEAR IN THE CONTENT OF THE SAFETY DATA SHEET*

ADR/RID - European agreement concerning the international transport of dangerous goods by road / rail

BCF – bioconcentration factor, is the ratio of a chemical's concentration in an organism to the chemical's aqueous concentration

CAS / CAS Number, is a unique numerical identifier assigned by the Chemical Abstracts Service (CAS) to every chemical substance described in the open scientific literature

DNEL – derived no effect level, is the level of exposure to a substance above which humans should not be exposed. The REACH regulation defines them as exposure levels beneath which a substance does not harm human health.

EC50 – half maximal effective concentration refers to the concentration of a drug, antibody or toxicant which induces a response halfway between the baseline and maximum after a specified exposure time.

ED50 - The "median effective dose" is the dose that produces a quantal effect (all or nothing) in 50% of the population that takes it (median referring to the 50% population base). It is also sometimes abbreviated as the ED50, meaning "effective dose for 50% of the population".

IC50 – half maximal inhibitory concentration is a measure of the potency of a substance in inhibiting a specific biological or biochemical function.

LC50 – lethal concentration is a measure of the lethal concentration of a toxin, radiation, or pathogen.

LD50 – lethal dose, for a substance is the dose required to kill half the members of a tested population after a specified test duration.

NOEC - no observed effects concentration

NOEL - no observed effects level

NOAEC - no observed adverse effects concentration

NOAEL - no observed adverse effects level

PBT – Persistent Bioaccumulative Toxic

PNEC – Predicted No Effect Concentration

vPvB - very Persistent and very Bioaccumulative

EC number - The European Community number is a unique seven-digit identifier that was assigned to substances for regulatory purposes within the European Union by the European Commission.