

#### MATERIAL SAFETY DATA SHEET: TOP WHITE ANTI-REFLEX FARBY KABE

Date of issue/update: 16-01-2019 / 01-03-2022

Issue no.: 4

# MATERIAL SAFETY DATA SHEET

Made in accordance with EU Regulation No. 2020/878

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

1.1. PRODUCT IDENTIFIER
Product:

# TOP WHITE ANTI-REFLEX

Anti-reflective paint for walls and ceilings

UFI: n/a

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

Topcoat paint intended for decorative paint coatings inside buildings, and primarily for painting walls and ceilings in dry residential and public rooms.

**1.3.** DETAILS OF THE MSDS PROVIDER Farby KABE Polska Sp. z o.o.

ul. Śląska 88, 40-742 Katowice

tel.: (32) 204 64 60, fax: (32) 204 64 66

Information about the product (during business hours): (32) 609 57 53

Person responsible for developing this MSDS: kch@farbykabe.pl

1.4. EMERGENCY TELEPHONE NUMBER in Poland: 112 or 998

SECTION 2: HAZARD IDENTIFICATION

2.1. CLASSIFICATION OF THE SUBSTANCE OR MIXTURE Classification according to the Regulation 1272/2008 / EC (CLP)

The mixture does not meet the classification criteria

2.2. LABEL ELEMENTS

Hazard pictograms: n/a

Signal Word: n/a

Hazard-determining components of labelling: n/a

#### Hazard Statements (H):

EUH208 – Contains: 1.2-benzothiazol-3-one, reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1). May produce an allergic reaction .

EUH211 Note! In case of spraying, dangerous respirable droplets may be formed. Do not inhale spray or mist.

#### **Precautionary Statements (P):**

P101 If necessary, seek medical advice, have product container or label at hand.

P102 Keep out of reach of children.

#### 2.3. OTHER HAZARDS

The mixture does not contain any substances meeting the criteria for PBT or vPvB according to Annex XIII, in an amount ≥0.1% by weight

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

In accordance with Directive 2004/42/CE the product is classified in category A/a - the maximum permitted VOC content is 30 g/ I. The product contains less than 30g/I VOC.

# **SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

3.1. SUBSTANCES

n/a

#### 3.2. MIXTURES

A mixture of acrylic copolymer dispersion with titanium dioxide, natural carbonate fillers and auxiliaries of organic origin.

Substances hazardous to health or the environment, contained in the mixture	Content in% by weight	Substance identifiers	Classification - symbols and risk phrases according to EC Regulation No. 1272/2008 (CLP)
Titanium dioxide*	5 - <10%	CAS No: 13463-67-7 EC No: 236-675-5 Index No: 022-006-002 Registration No: 01- 2119489379-17	EUH212 Substance with obligatory maximum limits for concentration at workplace
1.2-benzothiazol-3-one	0.005 - <0.02%	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=10) Breakpoints: C≥0.05% Skin Sens. 1
Pyrithione zinc	<0.016%	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)

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reaction mass of 5-chloro-2-	<0.0008%	CAS No: 55965-84-9	Estimated acute toxicity: - inhalation: ATE = 0.14 mg/L (dusts / mists) - oral: ATE = 221 mg / kg body weight	
methyl-2H-isothiazol-3-one		EC No: -		
and 2-methyl-2H-isothiazol-		Index No: 613-167-00-5	Acute Tox. 2, H310, H330; Acute Tox. 3	
3-one (3:1).		Registration No: -	H301	
			Skin Corr. 1C, H314; Eye Dam. 1, H318	
			Skin Sens. 1A, H317	
			Aquatic Acute 1, H400 (M=100); Aquati	
			Chronic 1, H410 (M=100)	
			EUH071	
			Limit concentrations:	
			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	

The full text of the H-phrases, codes and hazard classes is given in section 16.

\* Based on the manufacturer's statement, the substance contains <1% of particles with an aerodynamic diameter ≤10µm, and is not classified as 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, provide fresh air and consult a doctor.

**Contact with eyes:** Rinse eye with water, keeping eyelids open. Remove contact lenses, if present, and continue rinsing. If irritation occurs, consult an ophthalmologist.

**Contact with skin:** Take off contaminated clothes and shoes and wash / launder before reuse. Wash contaminated skin with water with generally available hygiene products (soaps, pastes, etc.). If irritation persists, consult a doctor.

Ingestion: rinse mouth with plenty of water, do not induce vomiting, consult a doctor.

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

- consumption may lead to irritation of the digestive system;

- contamination of the skin or eyes may lead to irritation or sensitization;

**4.3.** INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED If necessary, provide medical care.

## **SECTION 5:** FIREFIGHTING MEASURES

#### 5.1. EXTINGUISHING MEDIA

- Adequate extinguishing media: dry powder, snow extinguisher, water mist;

- Inadequate extinguishing media: water jet.

#### 5.2. SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

Burning produces dense black smoke. Inhalation of decomposition products or combustion can lead to serious health hazards. Hazardous decomposition products may be formed in the event of fire: carbon monoxide, carbon dioxide.

### 5.3. Advice for firefighters

quickly isolate the scene by removing persons from the vicinity of afire, fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus with full face mask covering operating at positive pressure. Basic level of protection for chemical incidents provides clothing for fire-fighters (including helmets, protective boots 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 shall be taken involving any personal risk or without suitable training. Evacuate people from surrounding areas and do not touch or walk on spilled material. Do not inhale the spray, use respiratory protection if necessary.

#### 6.1.2. FOR EMERGENCY RESPONDERS

Provide adequate ventilation . Suitable protective clothing – refer to 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

When wet, remove the 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

Refer to Section 8 for information on appropriate personal protective equipment. Refer to Section 13 for additional waste treatment information.

# SECTION 7: HANDLING AND STORAGE

#### 7.1. PRECAUTIONS FOR SAFE HANDLING

Exercise reasonable care and caution; inform employees about the dangers related to the operation of the product. Avoid exceeding the TLV value. Provide good ventilation. Do not inhale vapors or spray. In case of poor ventilation, wear a protective or gas mask with an air reservoir. Avoid contact with the eyes and skin. Do not eat, drink or smoke.

#### 7.2. CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

Store in tightly closed, original packaging, in a dry place, at a temperature from +5 to +25 °C. Protect against frost and high temperatures, e.g. against direct sunlight. Warranty period - 18 months from the production date.

#### 7.3. SPECIFIC END USE(S)

Detailed information about product intended use, properties and application is on the technical sheet and in the product catalogue. Applications not listed in this documentation should be consulted with your company representative.

# **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

#### 8.1. CONTROL PARAMETERS

Substance	CAS No	TLV (NDS)	STEL (NDSCh)	TLV-C (NDSP)
Titanium dioxide	13463-67-7			
- inhalable fraction	13403-07-7	10 mg/m <sup>3</sup>	-	-

In accordance with the Regulation of the Minister of Family, Labor and Social Policy of June 12, 2018 on the maximum permissible concentrations and intensities of factors harmful to health in the work environment (Journal of Laws 2018, item 1286), as amended.

#### 8.2. EXPOSURE CONTROLS

#### 8.2.1. APPROPRIATE ENGINEERING CONTROLS

- ensure proper ventilation of the room when working with the mixture, and personal protection measures,

- water intake with industrial shower and eye wash,

- do not eat, drink or smoke while working.

#### 8.2.2. INDIVIDUAL PROTECTION MEASURES, SUCH AS PERSONAL PROTECTIVE EQUIPMENT

- **respiratory protection:** in the event of inadequate ventilation of the room or during works where there is a risk of inhalation of the sprayed liquid, in order to maintain the permissible limit values for a given workplace in the scope of particle concentration, it is recommended to use respiratory protection measures. Recommended: dust respirator class FFP2 according to EN 149.

- hands protection: Chemical-resistant protective gloves in accordance with EN 374 with long cuffs must be worn. The choice of material quality and breakthrough time depends on the requirements of the workplace and must therefore be agreed with the supplier of the gloves. Follow the instructions for the use, storage, maintenance and replacement of gloves. Gloves protecting against mechanical damage are not suitable. Use protective hand cream as a precaution

- eye and face protection: use goggles or glasses with side walls (tightly fitting to the eyes) in accordance with PN-EN 166;

- skin protection: use work clothes; the selection of additional protection measures, such as an apron, shoes, etc., depends on the size of exposure and the type of operations performed.

#### 8.2.3. ENVIRONMENTAL EXPOSURE CONTROLS

Prevent large amounts of the mixture from getting into tanks, water courses, sewage systems and sewage. 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 (at the customer's request, the product may be delivered in a different colour)
- c) Odour: perceptible, characteristic
- d) Melting point/freezing point: no data
- e) Boiling point or initial boiling point and boiling range: no data
- f) Flammability: no data
- g) Lower and upper explosion limit: no data
- h) Flash point: n/a
- i) Auto-ignition temperature: n/a
- j) Decomposition temperature: n/a
- k) pH: 8-9
- I) Kinematic viscosity: no data
- m) Solubility: miscible with water
- n) Partition coefficient n-octanol/water (log value): n/a
- o) Vapour pressure: no data

p) Density and/or relative density: ca. 1.50 g/cm<sup>3</sup>

q) Relative vapour density: no data

#### r) Particle characteristics: n/a

#### 9.2. OTHER INFORMATION

9.2.1. INFORMATION WITH REGARD TO PHYSICAL HAZARD CLASSES n/a

9.2.2. OTHER SAFETY CHARACTERISTICS No data

# SECTION 10: STABILITY AND REACTIVITY

10.1. REACTIVITY No data

**10.2.** CHEMICAL STABILITY Stable under normal conditions of use.

10.3. POSSIBILITY OF HAZARDOUS REACTIONS

Dangerous reactions are unknown.

10.4. CONDITIONS TO AVOID

Temperatures out of the range of + 5°C to + 25°C,.

10.5. INCOMPATIBLE MATERIALS

Strong acids, strong bases, strong oxidants.

#### **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.

Class of hazard	Category	Effect
Acute toxicity	-	Based on the available information, the mixture does not meet the criteria for
		classification.
Corrosive / irritating effect	-	Based on the available information, the mixture does not meet the criteria for
on the skin		classification.
Serious eye damage / eye	-	Based on the available information, the mixture does not meet the criteria for
irritation		classification.
Respiratory or skin	-	On the basis of the available information, the mixture does not meet the criteria for
sensitization		classification as sensitizing. Due to additional requirements and content of 1.2-
		benzothiazol-3-one, reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-
		methyl-2H-isothiazol-3-one (3:1) meets the requirements for labelling with
		EUH208.
Mutagenic effect on	-	Based on the available information, the mixture does not meet the criteria for
reproductive cells		classification.
Carcinogenicity	-	On the basis of the available information, the mixture does not meet the criteria for
		classification. The manufacturer chose to use the additional warning phrase

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		EUH211, despite the fact that the mixture contains <1% titanium dioxide particles
		with an aerodynamic diameter of ≤10µm.
Harmful effect on	-	Based on the available information, the mixture does not meet the criteria for
reproduction		classification.
Specific target organ	-	Based on the available information, the mixture does not meet the criteria for
toxicity - single exposure		classification.
Specific target organ	-	Based on the available information, the mixture does not meet the criteria for
toxicity - repeated		classification
exposure		
Aspiration hazard	-	Based on the available information, the mixture does not meet the criteria for
		classification.

# 11.1.1. MIXTURES

Titanium dioxide CAS: 13463-67-7				
Class of hazard	Category	Effect		
Acute toxicity:				
- oral	-	LD50 > 5000 mg/kg		
- on skin	-	No data		
- inhalation	-	LC50 > 6.82mg/L (MMAD=1.55 μm, GSD=1.70 μm)		
		Based on the available data, the classification criteria are not met.		
Corrosive / irritating effect	-	Based on the available data, the classification criteria are not met.		
on the skin				
Serious eye damage / eye irritation	-	Based on the available data, the classification criteria are not met.		
Skin and respiratory sensitization	-	Based on the available data, the classification criteria are not met.		
Mutagenic effect on reproductive cells	-	Based on the available data, the classification criteria are not met.		
Carcinogenicity	-	Under EU Regulation 2020/217, titanium dioxide [as a powder containing 1% or more particles with an aerodynamic diameter of ≤10µm] is classified as Carc. 2 H351 Suspected of causing cancer (inhalation). Based on the manufacturer's declaration, the titanium dioxide used does not meet the conditions and is not classified as carcinogenic.		
Harmful effect on reproduction	-	Based on the available data, the classification criteria are not met.		
Specific target organ toxicity - single exposure	-	Based on the available data, the classification criteria are not met.		
Specific target organ toxicity - 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-benzoizotiazol-3(2H)-on	1.2-benzoizotiazol-3(2H)-one CAS: 2634-33-5			
Class of hazard	Category	Effect		
Acute toxicity:				
- oral	4	LD50 = 490 mg/kg body weight (OECD 401, rat)		
- on skin	-	LD50 > 2000 mg/kg body weight (OECD 402, rat)		
- inhalation	-	No information.		
		On the basis of the test results, the substance was classified as Acute Tox. 4, H302.		

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Corrosive / irritating effect	2	Based on the tests performed (EPA OPP 81-5, rabbit), the substance was not
on the skin		considered to be irritating to rabbit skin. However, it has been classified as Skin Irrit.
		2, Н315.
Serious eye damage / eye	1	On the basis of the conducted tests (OECD 437), the potential of the substance to
irritation		be acute irritating to eyes was found. On this basis, the substance was classified as
		Eye Dam. 1, H318.
Respiratory or skin	1	MKA (OECD 406, guinea pig) sensitizing - S 2220
sensitization		Based on the results of an in vivo skin sensitization study with guinea pigs, the
		substance was classified as skin sensitizing Skin Sens. 1B, H317.
Mutagenic effect on	-	Based on the available information, the substance does not meet the criteria for
reproductive cells		classification.
Carcinogenicity	-	Based on the available information, the substance does not meet the criteria for
		classification.
Harmful effect on	-	Based on the available information, the substance does not meet the criteria for
reproduction		classification.
Specific target organ	-	Based on the available information, the substance does not meet the criteria for
toxicity - single exposure		classification.
Specific target organ	-	Based on the available information, the substance does not meet the criteria for
toxicity - repeated		classification.
exposure		
Aspiration hazard	-	Based on the available information, the substance does not meet the criteria for
		classification.
Pyrithione zinc CAS: 13463-	41-7	
Class of hazard	Category	Effect
Acute toxicity:		
- oral	3	ATE = 221 mg/kg body weight
- on skin	_	LD50 > 2000 mg/kg body weight (rat, EPA OPP 81-2)
	-	
- inhalation	2	ATE = 0.14 mg/L (dusts / mists)
	2	ATE = 0.14 mg/L (dusts / mists) The substance has a harmonized classification where it has been classified as: Acute
	2	
	2	The substance has a harmonized classification where it has been classified as: Acute
- inhalation		The substance has a harmonized classification where it has been classified as: Acute Tox.2, H330; Acute Tox. 3, H301.
<ul> <li>- inhalation</li> <li>Corrosive / irritating effect on the skin</li> </ul>		The substance has a harmonized classification where it has been classified as: Acute         Tox.2, H330; Acute Tox. 3, H301.         Based on the available data, the classification criteria are not met.         Based on the results of studies conducted on rabbits (OECD 405), the substance was
- inhalation Corrosive / irritating effect	-	The substance has a harmonized classification where it has been classified as: Acute Tox.2, H330; Acute Tox. 3, H301. Based on the available data, the classification criteria are not met.
<ul> <li>- inhalation</li> <li>Corrosive / irritating effect on the skin</li> <li>Serious eye damage / eye</li> </ul>	-	The substance has a harmonized classification where it has been classified as: Acute         Tox.2, H330; Acute Tox. 3, H301.         Based on the available data, the classification criteria are not met.         Based on the results of studies conducted on rabbits (OECD 405), the substance was
- inhalation Corrosive / irritating effect on the skin Serious eye damage / eye irritation	- 1	The substance has a harmonized classification where it has been classified as: Acute Tox.2, H330; Acute Tox. 3, H301.         Based on the available data, the classification criteria are not met.         Based on the results of studies conducted on rabbits (OECD 405), the substance was classified as causing serious eye damage Eye Dam. 1, H318.
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- inhalation Corrosive / irritating effect on the skin Serious eye damage / eye irritation Respiratory or skin sensitization	- 1	<ul> <li>The substance has a harmonized classification where it has been classified as: Acute Tox.2, H330; Acute Tox. 3, H301.</li> <li>Based on the available data, the classification criteria are not met.</li> <li>Based on the results of studies conducted on rabbits (OECD 405), the substance was classified as causing serious eye damage Eye Dam. 1, H318.</li> <li>No sensitization was found in a study carried out on mice (OECD 429).</li> </ul>
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- inhalation Corrosive / irritating effect on the skin Serious eye damage / eye irritation Respiratory or skin sensitization Mutagenic effect on reproductive cells Carcinogenic effect Harmful effect on reproduction Specific target organ	- 1 - -	<ul> <li>The substance has a harmonized classification where it has been classified as: Acute Tox.2, H330; Acute Tox. 3, H301.</li> <li>Based on the available data, the classification criteria are not met.</li> <li>Based on the results of studies conducted on rabbits (OECD 405), the substance was classified as causing serious eye damage Eye Dam. 1, H318.</li> <li>No sensitization was found in a study carried out on mice (OECD 429).</li> <li>Based on the available data, the classification criteria are not met.</li> <li>Based on the available data, the classification criteria are not met.</li> <li>The substance has a harmonized classification where it has been classified as: Reprint 1B, H360D May cause harm to the unborn child.</li> </ul>
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<ul> <li>inhalation</li> <li>Corrosive / irritating effect on the skin</li> <li>Serious eye damage / eye irritation</li> <li>Respiratory or skin sensitization</li> <li>Mutagenic effect on reproductive cells</li> <li>Carcinogenic effect</li> <li>Harmful effect on reproduction</li> <li>Specific target organ toxicity - single exposure</li> <li>Specific target organ toxicity - repeated</li> </ul>	- 1 - - - 1B -	<ul> <li>The substance has a harmonized classification where it has been classified as: Acute Tox. 2, H330; Acute Tox. 3, H301.</li> <li>Based on the available data, the classification criteria are not met.</li> <li>Based on the results of studies conducted on rabbits (OECD 405), the substance was classified as causing serious eye damage Eye Dam. 1, H318.</li> <li>No sensitization was found in a study carried out on mice (OECD 429).</li> <li>Based on the available data, the classification criteria are not met.</li> <li>Based on the available data, the classification criteria are not met.</li> <li>The substance has a harmonized classification where it has been classified as: Repr. 1B, H360D May cause harm to the unborn child.</li> <li>Based on the available data, the classification criteria are not met.</li> <li>The substance has a harmonized classification criteria are not met.</li> </ul>

# MATERIAL SAFETY DATA SHEET: TOP WHITE ANTI-REFLEX FARBY KABE

Issue no. 4

Date of issue/update: 16-01-2	019/01-03-2	022 Issue no. 4
Class of hazard	Category	Effect
Acute toxicity:		
- oral	3	LD50 = 66 mg/kg body weight (OECD 401, rat)
- on skin	2	LD50 > 141 mg/kg body weight (OECD 402, rat)
- inhalation	2	LC50/4h = 0.171 mg/L (OECD 403, rat)
		The mixture has a harmonized classification where it was classified as: Acute Tox. 2,
		H310, H330; Acute Tox. 3, H301.
Corrosive / irritating effect	1C	The mixture has a harmonized classification where it was classified as: Skin Corr. 1C,
on the skin		H314.
Serious eye damage / eye	1	The mixture has a harmonized classification where it was classified as: Eye Dam. 1,
irritation		H318.
Respiratory or skin	1A	The mixture has a harmonized classification where it was classified as: Skin Sens.
sensitization		1A, H317.
Mutagenic effect on	-	Based on the available information, the mixture does not meet the criteria for
reproductive cells		classification.
Carcinogenic effect	_	Based on the available information, the mixture does not meet the criteria for
caremogenie erreet		classification
llawaful offert en		
Harmful effect on	-	Based on the available information, the mixture does not meet the criteria for classification.
reproduction		
Specific target organ	-	Based on the available information, the mixture does not meet the criteria for
toxicity - single exposure		classification
Specific target organ	-	Based on the available information, the mixture does not meet the criteria for
toxicity - repeated		classification.
exposure		
Aspiration hazard	-	Based on the available information, the mixture does not meet the criteria for
		classification

# 11.2. INFORMATION ON OTHER HAZARDS

No data

# 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. Prevent leakage to soil, water reservoirs, groundwater or sewage system.

Toxicity of components of the mixture
Titanium dioxide CAS: 13463-67-7
Aquatic toxicity:
- short-term toxicity to fish: LC50 > 1000 mg/L (for freshwater fish), LC50 > 10000 mg/L (for sea fish)
- short-term toxicity to aquatic invertebrates: EC50 > 1000 mg/L (for freshwater invertebrates), LC50 > 10000 mg/L (for marine
invertebrates)
<ul> <li>toxicity to microorganisms: NOEC/3h &gt; 1000 mg/L</li> </ul>
1.2-benzoizotiazol-3(2H)-one CAS: 2634-33-5
Aquatic toxicity:
- short-term toxicity to fish: LC50 = 2.15 mg/L (for freshwater fish)
<ul> <li>short-term toxicity to aquatic invertebrates: EC50/LC50 = 2.9 mg/L (freshwater invertebrates)</li> </ul>
- toxicity to aquatic algae and cyanobacteria: EC50 = 0.110 μg/L, EC10 or NOEC = 40.3 μg/L (freshwater algae)
- toxicity to microorganisms: EC10 or NOEC = 10.3 mg/L
Land toxicity:
<ul> <li>short-term toxicity to land microorganisms: EC50 or LC50 = 410.6 mg/kg dry land mass</li> </ul>
<ul> <li>long-term toxicity to land macroorganisms: EC10, LC10 or NOEC = 234.5 mg/kg dry land mass</li> </ul>
<ul> <li>short-term toxicity to terrestrial plants: EC50 or LC50 = 200 mg/kg dry land mass</li> </ul>

MATERIAL SAFETY DATA SHEET: TOP WHITE ANTI-REFLEX FARBY KABE Date of issue/update: 16-01-2019 / 01-03-2022

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long-term toxicity to terrestrial plants: EC10, LC10 or NOEC = 30 mg/kg dry land mass
 short-term toxicity to soil microorganisms: EC50 = 811.5 mg/kg dry land mass

- long-term toxicity to soil microorganisms: EC10, NOEC = 263.7 mg/kg dry land mass

### Pyrithione zinc CAS: 13463-41-7

#### Aquatic toxicity:

- short-term toxicity: LC50 = 0.003 mg / L (for freshwater fish), LC50 = 0.4 mg / L (for marine fish)

- short-term toxicity for aquatic invertebrates: EC50 = 0.008 mg / L (for freshwater invertebrates), EC50 = 0.006 mg / L (for marine invertebrates)

- short-term toxicity for aquatic algae and cyanobacteria: EC50 = 0.003 mg / L (freshwater algae), EC50 = 0.001 mg / L (marine algae)

- toxicity for microorganisms: EC50 = 2.4 mg / L, EC10 or NOEC = 0.1 mg / L

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

- short-term toxicity to fish: LC50/96h = 0.19 mg/L (for freshwater fish)

- short-term toxicity to fish: NOEC/38d = 0.02 mg/L (freshwater fish)

- short-term toxicity to aquatic invertebrates: EC50 = 0.16 mg/L (freshwater invertebrates)

- long-term toxicity to aquatic invertebrates: NOEC/21d = 0.10 mg/L (freshwater invertebrates)

- toxicity to aquatic algae and cyanobacteria: EC50 = 0.037 mg/L (freshwater algae), EC10 or NOEC = 0.004 mg/L (sea algae)

- toxicity to microorganisms: NOEC/3h = 0.91 mg/L

#### 12.2. PERSISTENCE AND DEGRADABILITY

#### 1.2-benzoizotiazol-3(2H)-one CAS: 2634-33-5

OECD 302 B Zahn-Wellens Test ~90% (wastewater organisms) S 3509

OECD 303 A: Activated Sludge Units > 70% (wastewater organisms) S 978

#### Pyrithione zinc CAS: 13463-41-7

OECD 308 Simulation Biodegradation Aqu Sed System: 0.5 d - S 3418

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

The 10-day period criterion is not met. Reluctantly biodegradable: 62% after 28d (OECD 301B).

#### 12.3. BIOACCUMULATIVE POTENTIAL

#### 1.2-benzoizotiazol-3(2H)-one CAS: 2634-33-5

OECD 305 Bioconcentration coefficien 6,95 (fish) S 2243

OECD 117 Partition coefficient log Pow (method HPL) 0,7 (n-octanol/water) S 324

#### Pyrithione zinc CAS: 13463-41-7

Partition coefficient n-octanol / water: log Kow: 1.21 - S 2781 (OECD 107).

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

Partition coefficient n-octanol / water: log Kow: -0.48 – 0.40 in 24°C (OECD 107).

Bioconcentration factor (BCF): 54 (28d, 20°C, OECD 305 E, bluegill salmon)

12.4. MOBILITY IN SOIL

#### 1.2-benzoizotiazol-3(2H)-one CAS: 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-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) CAS: 55965-84-9

log Koc: 0.82 – 1 (OECD 106)

12.5. RESULTS OF PBT AND VPVB ASSESSMENT

The mixture does not contain any substances meeting the PBT or vPvB criteria, according to Annex XIII.

#### 12.6. ENDOCRINE DISRUPTING PROPERTIES

n/a

#### 12.7. OTHER ADVERSE EFFECTS

none

# SECTION 13: DISPOSAL CONSIDERATIONS

#### **13.1.** Waste treatment methods

Issue no. 4

Comply with the provisions of the Waste Act of December 14, 2012 (consolidated text Journal of Laws of 2021, item 779). Do not empty into drains. Do not allow contamination of surface and ground waters. Do not dispose of together with municipal waste. Dispose of in accordance with local regulations. Opened packaging, residual material or expired material must be taken to a public collection point.

#### Waste Code:

- package contents by type: 08 01 20 water suspensions of paints and varnishes other than those mentioned in 08 01 19

- Packaging: 15 01 02 plastic packaging.

SECTION 14: TRANSPORT INFORMATION						
14.1 n/a	I. UN NUMBER OR ID NUMBER					
14.2 n/a	2. UN PROPER SHIPPING NAME					
14.3 n/a	3. TRANSPORT HAZARD CLASS(ES)					
14.4 n/a	1. PACKING GROUP					
14.5 n/a	5. ENVIRONMENTAL HAZARDS					
14.6 n/a	5. SPECIAL PRECAUTIONS FOR USER					
14.7	7. MARITIME TRANSPORT IN BULK ACCORDING TO IMO INSTRUMENTS					

n/a

# **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)

- 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 (EC) 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 (with later changes, consolidated text– as of 28.04.2020)

- 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 (with later changes, consolidated text– as of 01.05.2020)

- Act of chemical substances and their mixtures of 25 February 2011 - consolidated text Journal of Laws 2019, Item 1225 and changes to the Journal of Laws of 2020, item 284, 322 and 1337

- The Ordinance of the Minister of Labour And Social Policy of 12 June 2018 on maximum acceptable concentrations and intensities of factors harmful to health in a work environment. (Journal of Laws [Dz. U.] 2018, item 1286 with later amendments).

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- The ordinance of the Minister of Development of 8 August 2016 on the limitation of emissions of volatile organic compounds contained in certain paints and varnishes intended for painting buildings and their finishing and furnishing elements as well as those associated with buildings and these structural elements, and in mixtures for restoring vehicles (Journal of Laws 2016, item 1353)

- ORDINANCE OF MINISTER OF LABOUR AND SOCIAL POLICY of September 26, 1997 on general provisions on health and safety at work (Journal of Laws of 1997, No. 129, item 844) as amended (Journal of Laws of 2003, No. 169, item 1650, Journal of Laws of 2007, No. 49, item 330, Journal of Laws of 2008, No. 108, item 690)

- Act of Waste of December 14, 2012 (consolidated text Journal of Laws of 2021, item 779)

- Regulation of the Minister of Climate of 2 January 2020 on the waste catalog (Journal of Laws of 2020, item 10)

# 15.2. CHEMICAL SAFETY ASSESSMENT

Not performed

# **SECTION 16: OTHER INFORMATION**

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 all responsibility

- for determining usability of the product for particular purposes
- and resulting from improper use of information included in the Data Sheet.

#### 16.1. PHRASES USED IN SECTION 3

Acute Tox 2 Acute toxicity category 2

H310 Fatal in contact with skin

H330 Inhalation may be fatal

Acute Tox. 3 Acute toxicity, category 3

H301 Toxic if swallowed

Acute Tox. 4 Acute toxicity category 4

H302 Harmful if swallowed.

Skin corr. 1C Skin corrosion category 1C

H314 Causes severe skin burns and eye damage

Eye Dam. 1 Serious Eye Damage / Eye Irritation, category 1

H318 Causes serious eye damage.

Skin Irrit. 2 Skin corrosion / irritation, category 2

H315 Causes skin irritation

Skin Sens. 1A, 1 Skin allergy 1A, 1

H317 May cause an allergic skin reaction

Carc. 2 Carcinogenicity, category 2

H351 Suspected of causing cancer (inhalation).

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 <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>.

Aquatic Acute 1 Hazardous to the aquatic environment, acute toxicity, category 1

H400 Highly toxic to aquatic organisms

Aquatic Chronic 1 Hazardous to the aquatic environment - Chronic Hazard, Category 1

H410 Very toxic to aquatic life with long lasting effects

EUH071 Corrosive to the respiratory tract

EUH212 Note! In case of use, hazardous respirable dust may be formed. Do not inhale the dust.

#### 16.2. CHANGES INTRODUCED TO THE SHEET DURING UPDATE

The composition was changed in section 3.2 and the rest of the information was updated, in particular in sections 8, 9, 11, 12, 13, 15 and 16.

16.3. ABBREVIATIONS THAT MAY APPEAR IN THE CONTENT OF THE SAFETY DATA SHEET ADR/RID - European Agreement concerning the International Carriage of Dangerous Goods by Road

BCF – (English language bioconcentration factor) bioconcentration factor (bioconcentration) - the ratio of the concentration of a substance in the body to its concentration in water at equilibrium

CAS / CAS Number - is a unique numerical identifier assigned by the Chemical Abstracts Service

DNEL – (English language derived no effect level) is the level of exposure to a substance

EC50 – (English language effect concentration) is the concentration of a substance in an environmental medium expected to produce a certain effect in 50% of test organisms

ED50 - (English language effective dose) is the dose of a medication that produces a specific effect in 50% of the population that takes that dose.

IC50 – (English language inhibitory concentration) – medial concentration of inhibitor that inhibits 50% of biological and biochemical functions of organisms. This parameter is used to describe the growth restriction of bacteria, algae and other organisms.

LC50 – (English language lethal concentration) the concentration of a compound in the inhaled air that causes the death of 50% of a specified animal species after a specified inhalation time.

LD50 - lethal dose - the dose at which death of 50% of the tested animals is observed within a specified time period.

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NDS - maximum permissible concentration - the weighted average value of the concentration, the impact of which on the worker during the 8-hour daily and average weekly working time, for the period of his professional activity, should not cause negative changes in his health and in the health of his future generations.

NDSCh - the maximum permissible instantaneous concentration - the average value of the concentration of a specific toxic chemical compound or dust, which should not cause negative changes in the health condition of an employee, if it occurs in the work environment for no longer than 15 minutes and not more often than 2 times during a work shift, with an interval of time not less than 1 hour.

NDSP - the maximum permissible ceiling concentration - the concentration value of a toxic chemical compound or dust, which, due to the threat to the health or life of the employee, must not be exceeded at any time.

NOEC - (English language no observed effects concentration) – the highest concentration for which there is no significant increase in the frequency or intensity of the effects of the substance in the test organisms compared to the control sample.

NOEL - (English language no observed effects level) – the highest dose for which there is no significant increase in the frequency or intensity of the effects of a given substance in the tested organisms compared to the control sample.

NOAEC - (English language no observed adverse effects concentration) – the highest concentration enabling the determination of the dose-response relationship when there is no statistically or biologically significant increase in the frequency or severity of the harmful effects of the substance in the test organisms compared to the control sample.

NOAEL - (English language no observed adverse effects level) – dose enabling the determination of the dose-response relationship when there is no statistically or biologically significant increase in the frequency or intensity of the harmful effects of the substance in the test organisms in relation to the control sample.

UN Number – is a four-digit identification number of the material in the United Nations Inventory of Hazardous Materials, derived from the "UN Model Regulations" to which the individual material, mixture or object is classified

PBT – (English language Persistent Bioaccumulative Toxic) persistent, bio accumulative and toxic.

PNEC – (English language Predicted No Effect Concentration) predicted no effect concentration in the environment.

vPvB - (English language very Persistent and very Bioaccumulative) very Persistent and very Bio accumulative substance

EC (WE) / EC (WE) number - the number assigned to a chemical in the European Inventory of Existing Chemical Substances (EINECS), in the European List of Notified Chemical Substances (ELINCS) or in the list of chemicals listed in the publication "No-longer polymers".