

## SAFETY DATA SHEET

#### Professional Solar Reflective Paint

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

1.1 Product identifier

Product name : Professional Solar Reflective Paint

Product description : Paint
Product type : Liquid.

UFI : CJXA-CJV8-NNJQ-6THR

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

	Identified uses
Industrial use Professional use	

Uses advised against	Reason
Consumer use	Product is not intended for consumer use.

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

**RUST-OLEUM EUROPE** 

Martin Mathys NV, Kolenbergstraat 23, B-3545 Zelem, Belgium

Telephone no.: +32 (0) 13 460 200

Fax no.: +32 (0) 13 460 201

Tor Coatings Limited

Unit 21, White Rose Way, Follingsby Park, Gateshead, Tyne & Wear, NE10 8YX United Kingdom

Telephone no.: +44 (0) 191 4106611 Fax no.: +44 (0) 191 4920125 enquiries@tor-coatings.com

e-mail address of person :

responsible for this SDS

: rpmeurohas@rustoleum.eu

#### 1.4 Emergency telephone number

#### National advisory body/Poison Centre

**Supplier** 

**Telephone number** : +44 870 8200418 / +44 2038073798

Hours of operation : 24 / 7

#### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

**Product definition**: Mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

**STOT RE 2, H373** 

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

#### 2.2 Label elements

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#### **SECTION 2: Hazards identification**

**Hazard pictograms** 

Signal word : Warning

**Hazard statements** : May cause damage to organs through prolonged or repeated exposure.

**Precautionary statements** 

General : Not applicable.

**Prevention** : P260 - Do not breathe vapour.

Response : Not applicable. **Storage** : Not applicable.

: P501 - Dispose of contents and container in accordance with all local, regional, **Disposal** 

national and international regulations.

**Hazardous ingredients** : crystalline silica, respirable powder

Supplemental label

elements

Contains 1,2-benzisothiazol-3(2H)-one, 2-octyl-2H-isothiazol-3-one and reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1). May produce an allergic reaction. Warning! Hazardous respirable droplets may be formed when sprayed. Do not

breathe spray or mist.

Supplemental label elements: Detergents -Regulation (EC) No

907/2006

: Not applicable.

**Annex XVII - Restrictions** on the manufacture, placing on the market and use of certain dangerous substances, mixtures and

articles

: Not applicable.

**Special packaging requirements** 

Containers to be fitted with child-resistant

fastenings

: Not applicable.

Tactile warning of danger : Not applicable.

#### 2.3 Other hazards

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

Other hazards which do not result in classification : None known.

### **SECTION 3: Composition/information on ingredients**

: Mixture 3.2 Mixtures

**United Kingdom: Great Britain** 

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## **SECTION 3: Composition/information on ingredients**

Product/ingredient name	Identifiers	%	Regulation (EC) No. 1272/2008 [CLP]	Туре
titanium dioxide	REACH #: 01-2119489379-17 EC: 236-675-5 CAS: 13463-67-7	≥10 - ≤25	Carc. 2, H351 (inhalation)	[1] [2] [*]
crystalline silica, respirable powder	REACH #: 01-2120770509-45 EC: 238-878-4 CAS: 14808-60-7	≤5	STOT RE 1, H372 (respiratory tract) (inhalation)	[1] [2]
propane-1,2-diol	REACH #: 01-2119456809-23 EC: 200-338-0 CAS: 57-55-6	≤3	Not classified.	[2]
propylidynetrimethanol	REACH #: 01-2119486799-10 EC: 201-074-9 CAS: 77-99-6	≤0,3	Repr. 2, H361fd	[1]
1,2-benzisothiazol-3(2H)-one	REACH #: 01-2120761540-60 EC: 220-120-9 CAS: 2634-33-5 Index: 613-088-00-6	<0,05	Acute Tox. 4, H302 Acute Tox. 2, H330 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 2,	[1]
pyrithione zinc	REACH #: 01-2119511196-46 EC: 236-671-3 CAS: 13463-41-7	<0,01	Acute Tox. 3, H301 Acute Tox. 2, H330 Eye Dam. 1, H318 Repr. 1B, H360D STOT RE 1, H372 Aquatic Acute 1, H400 (M=1000) Aquatic Chronic 1, H410 (M=10)	[1]
2-octyl-2H-isothiazol-3-one	REACH #: 17-2119390467-28 EC: 247-761-7 CAS: 26530-20-1 Index: 613-112-00-5	<0,001	Acute Tox. 3, H301 Acute Tox. 3, H311 Acute Tox. 2, H330 Skin Corr. 1, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Acute 1, H400 (M=100) Aquatic Chronic 1, H410 (M=100)	[1]
reaction mass of: 5-chloro- 2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H- isothiazol-3-one [EC no. 220-239-6] (3:1)	REACH #: 01-2120764691-48 EC: 611-341-5 CAS: 55965-84-9 Index: 613-167-00-5	<0,001	Acute Tox. 3, H301 Acute Tox. 2, H310 Acute Tox. 2, H330 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Acute 1, H400 (M=100) Aquatic Chronic 1, H410 (M=100) See Section 16 for	[1]
			the full text of the H statements declared above.	

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### **SECTION 3: Composition/information on ingredients**

#### Type

- [1] Substance classified with a health or environmental hazard
- [2] Substance with a workplace exposure limit
- [3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII
- [4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII
- [5] Substance of equivalent concern
- [6] Additional disclosure due to company policy
- [\*] The classification as a carcinogen by inhalation applies only to mixtures placed on the market in powder form containing 1% or more of titanium dioxide particles with diameter ≤ 10 µm not bound within a matrix.

SCL (Specific Concentration Limits)	
1,2-benzisothiazol-3(2H)-one	H317 = 0.05 %
reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)	H317 = 0.0015 %
2-octyl-2H-isothiazol-3-one	H317 = 0.0015 %
ATE (acute toxicity estimates)	
2-octyl-2H-isothiazol-3-one	H330: ATE= 0,27 mg/L (dusts/mists) H311: ATE= 311 mg/kg H301: ATE= 125 mg/kg
<u>Nanoform</u>	
Particle characteristics	Particle Size
Contains >0.1% - <1% silicon dioxide CAS# 7631-86-9 / EC# 231-545-4	1-100 nm

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

#### **SECTION 4: First aid measures**

#### 4.1 Description of first aid measures

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: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention following exposure or if feeling unwell.

Inhalation

: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention following exposure or if feeling unwell. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

#### Skin contact

Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention following exposure or if feeling unwell. Wash clothing before reuse. Clean shoes thoroughly before reuse.

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#### **SECTION 4: First aid measures**

#### Ingestion

: Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention following exposure or if feeling unwell. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

#### **Protection of first-aiders**

: No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

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

#### Over-exposure signs/symptoms

Eye contact : No specific data.

Inhalation : No specific data.

Skin contact : No specific data.

Ingestion : No specific data.

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

Notes to physician

: Treat symptomatically. Contact poison treatment specialist immediately if large

quantities have been ingested or inhaled.

**Specific treatments**: No specific treatment.

### **SECTION 5: Firefighting measures**

#### 5.1 Extinguishing media

Suitable extinguishing

media

: Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing

media

: None known.

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

Hazards from the substance or mixture : In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous combustion products

: Decomposition products may include the following materials: carbon dioxide

carbon monoxide metal oxide/oxides

#### 5.3 Advice for firefighters

Special protective actions for fire-fighters

: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters

: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

Additional information : No unusual hazard if involved in a fire.

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#### SECTION 6: Accidental release measures

#### 6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders: If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

#### **6.2 Environmental** precautions

: Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

#### 6.3 Methods and material for containment and cleaning up

**Small spill** 

: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

#### Large spill

: Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product.

#### 6.4 Reference to other sections

See Section 1 for emergency contact information. See Section 8 for information on appropriate personal protective equipment. See Section 13 for additional waste treatment information.

## SECTION 7: Handling and storage

The information in this section contains generic advice and guidance.

#### 7.1 Precautions for safe handling

**Protective measures** 

: Put on appropriate personal protective equipment (see Section 8). Do not breathe vapour or mist. Do not ingest. Avoid contact with eyes, skin and clothing. Keep in the original container or an approved alternative made from a compatible material. kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

#### **Advice on general** occupational hygiene

: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

#### 7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

#### 7.3 Specific end use(s)

Recommendations Not available.

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## **SECTION 7: Handling and storage**

Industrial sector specific solutions

: Not available.

### **SECTION 8: Exposure controls/personal protection**

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker exposure or environmental releases.

#### 8.1 Control parameters

## Occupational exposure limits United Kingdom: Great Britain

Product/ingredient name	Exposure limit values
crystalline silica, respirable powder	EH40/2005 WELs (United Kingdom (UK), 8/2018).
	TWA: 0,1 mg/m³ 8 hours. Form: respirable dust
propane-1,2-diol	EH40/2005 WELs (United Kingdom (UK), 1/2020).
	TWA: 10 mg/m³ 8 hours. Form: Particulate
	TWA: 474 mg/m³ 8 hours. Form: total vapour and particulates
	TWA: 150 ppm 8 hours. Form: total vapour and particulates

## Recommended monitoring procedures

: If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

#### **DNELs/DMELs**

Product/ingredient name	Type	Exposure	Value	Population	Effects
titanium dioxide	DNEL	Long term Inhalation	10 mg/m³	Workers	Local
	DNEL	Long term Oral	700 mg/kg bw/day	General population [Consumers]	Systemic
propylidynetrimethanol	DNEL	Long term Oral	1,68 mg/ kg bw/day	General population	Systemic
	DNEL	Long term Dermal	1,68 mg/ kg bw/day	General population	Systemic
	DNEL	Long term Dermal	2,79 mg/ kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	5,03 mg/m <sup>3</sup>	General population	Systemic
	DNEL	Long term Inhalation	19,54 mg/ m³	Workers	Systemic
	DNEL	Short term Oral	50 mg/kg bw/day	General population	Systemic
	DNEL	Short term Dermal	83,3 mg/ kg bw/day	General population	Systemic
	DNEL	Short term Dermal	138,8 mg/ kg bw/day	Workers	Systemic
	DNEL	Short term Inhalation	925 mg/m³	General population	Systemic
	DNEL	Short term Inhalation	3037,3 mg/ m³	Workers	Systemic

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### **SECTION 8: Exposure controls/personal protection**

#### **PNECs**

Product/ingredient name	Compartment Detail	Value	Method Detail
titanium dioxide	Fresh water	0,127 mg/l	-
	Marine	>1 mg/l	-
	Sewage Treatment	>100 mg/l	-
	Plant		
	Fresh water sediment	>1000 mg/kg	-
	Marine water sediment	>100 mg/kg	-
	Soil	100 mg/kg	-

#### 8.2 Exposure controls

## Appropriate engineering controls

: If user operations generate dust, fumes, gas, vapour or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

#### **Individual protection measures**

#### **Hygiene measures**

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

#### **Eye/face protection**

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. Use eye protection according to EN 166. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields. Recommended: safety glasses with side-shields.

#### **Skin protection**

There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals.

The breakthrough time must be greater than the end use time of the product.

The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed.

Gloves should be replaced regularly and if there is any sign of damage to the glove material.

Always ensure that gloves are free from defects and that they are stored and used correctly.

The performance or effectiveness of the glove may be reduced by physical/chemical damage and poor maintenance. Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred.

#### **Hand protection**

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. > 8 hours (breakthrough time): > 8 hours (breakthrough time): nitrile rubber (0.5mm)

The recommendation for the type or types of glove to use when handling this product is based on information from the following source: EN374. The user must check that the final choice of type of glove selected for handling this product is the most appropriate and takes into account the particular conditions of use, as included in the user's risk assessment.

#### **Body protection**

: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Recommended: Wear overalls or long sleeved shirt. (EN 467)

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### **SECTION 8: Exposure controls/personal protection**

Other skin protection

: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Respiratory protection** 

: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. Recommended: organic vapour (Type A) and particulate filter (EN 140)

**Environmental exposure** controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### SECTION 9: Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

#### 9.1 Information on basic physical and chemical properties

**Physical state** : Liquid. Colour : White.

**Odour** Not available. **Odour threshold** Not available.

Melting point/freezing point

Initial boiling point and

boiling range

: 0°C

: >100°C (>212°F) [Literature]

Flammability (solid, gas)

: Non-flammable in the presence of the following materials or conditions: open flames, sparks and static discharge, heat and shocks and mechanical impacts.

Non-flammable but will burn on prolonged exposure to flame or high

temperature.

Upper/lower flammability or

explosive limits

Not available.

Flash point **Auto-ignition temperature**  : Not relevant due to nature of the product. : Not relevant due to nature of the product.

**Decomposition temperature** 

Not available.

8.5

pH: Justification

: Not available.

**Viscosity** 

: Dynamic: 650 mPa·s

Solubility(ies)

: Easily soluble in the following materials: cold water and hot water.

Solubility in water Partition coefficient: n-octanol/ : Not applicable.

water

: Not available.

: 2,3 kPa (17,25 mm Hg) [calculated.] Vapour pressure

**Evaporation rate** : <1 (butyl acetate = 1) : 1,39 to 1,41 [calculated.] Relative density

: 1,409956 g/cm³ [20°C (68°F)] [calculated.] **Density** 

: >1 [Air = 1] Vapour density

: Non-explosive in the presence of the following materials or conditions: open **Explosive properties** 

flames, sparks and static discharge and heat.

No unusual hazard if involved in a fire.

**Oxidising properties** 

: Not available.

**Particle characteristics** 

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## **SECTION 9: Physical and chemical properties**

Median particle size : Not applicable.

## **SECTION 10: Stability and reactivity**

10.1 Reactivity : No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical stability : The product is stable.

10.3 Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid : No specific data.

10.5 Incompatible materials : No specific data.

10.6 Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced. If involved in a fire, toxic gases including CO, CO2 and smoke can be generated.

### **SECTION 11: Toxicological information**

### 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008 **Acute toxicity**

Product/ingredient name	Result	Species	Dose	Exposure
propylidynetrimethanol	LD50 Oral	Rat	14000 mg/kg	-
1,2-benzisothiazol-3(2H)- one	LC50 Inhalation Dusts and mists	Rat	0,11 mg/l	4 hours
	LC50 Inhalation Dusts and	Rat - Male, Female	0,5 mg/l	4 hours
	LD50 Oral	Rat - Male	490 mg/kg	-
pyrithione zinc	LC50 Inhalation Dusts and mists	Rat	140 mg/m³	4 hours
	LD50 Dermal LD50 Oral	Rabbit Rat	100 mg/kg 177 mg/kg	-
2-octyl-2H-isothiazol-3-one	LC50 Inhalation Dusts and	Rat	0,27 mg/l	4 hours
	LD50 Dermal LD50 Dermal	Rabbit Rat	311 mg/kg	-
	LD50 Definal	Rat	>2000 mg/kg 248 mg/kg	-
reaction mass of: 5-chloro- 2-methyl-4-isothiazolin- 3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol- 3-one [EC no. 220-239-6] (3: 1)	LC50 Inhalation Dusts and mists	Rat - Male, Female	0,171 mg/l	4 hours
,	LD50 Dermal	Rabbit	92,4 mg/kg	-
	LD50 Oral	Rat	64 mg/kg	-

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

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## **SECTION 11: Toxicological information**

Product/ingredient name	Oral (mg/ kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)
propylidynetrimethanol	14000	N/A	N/A	N/A	N/A
1,2-benzisothiazol-3(2H)-one	490	N/A	N/A	0,5	N/A
pyrithione zinc	221	N/A	N/A	N/A	0,14
2-octyl-2H-isothiazol-3-one	125	311	N/A	N/A	0,27
reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)	64	92,4	N/A	N/A	0,171

#### **Irritation/Corrosion**

Product/ingredient name	Result	Species	Score	Exposure	Observation
2-octyl-2H-isothiazol-3-one reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3: 1)	Eyes - Severe irritant Skin - Severe irritant	Rabbit Human	-	- 0.01 Percent	-
,	Skin - Severe irritant Eyes - Severe irritant	Rabbit Rabbit	-	-	1 to 4 hours

#### **Conclusion/Summary**

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

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

**Respiratory**: May cause damage to organs through prolonged or repeated exposure.

#### **Sensitisation**

Product/ingredient name	Route of exposure	Species	Result
1,2-benzisothiazol-3(2H)-one 2-octyl-2H-isothiazol-3-one reaction mass of: 5-chloro- 2-methyl-4-isothiazolin- 3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol- 3-one [EC no. 220-239-6] (3: 1)	skin skin	Guinea pig Rat Guinea pig	Sensitising Sensitising Sensitising

#### **Conclusion/Summary**

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

**Mutagenicity** 

**Conclusion/Summary**: Based on available data, the classification criteria are not met.

**Carcinogenicity** 

It has been observed that the carcinogenic hazard of this product arises when respirable dust is inhaled in quantities leading to significant impairment of particle clearance mechanisms in the lung.

**Conclusion/Summary**: Based on available data, the classification criteria are not met.

Reproductive toxicity

**Conclusion/Summary**: Based on available data, the classification criteria are not met.

**Teratogenicity** 

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

Specific target organ toxicity (single exposure)

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### **SECTION 11: Toxicological information**

Not available.

#### Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
crystalline silica, respirable powder pyrithione zinc	Category 1 Category 1	inhalation -	respiratory tract

#### **Aspiration hazard**

Not available.

Information on likely routes

of exposure

: Not available.

Potential acute health effects

Eye contact
 Inhalation
 No known significant effects or critical hazards.
 Skin contact
 No known significant effects or critical hazards.
 Ingestion
 No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No specific data.

Inhalation : No specific data.

Skin contact : No specific data.

Ingestion : No specific data.

#### Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Short term exposure** 

Potential immediate : Not available.

effects

Potential delayed effects: Not available.

**Long term exposure** 

Potential immediate : Not available.

effects

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

**Conclusion/Summary**: Based on available data, the classification criteria are not met.

**General** : May cause damage to organs through prolonged or repeated exposure.

Carcinogenicity : No known significant effects or critical hazards.
 Mutagenicity : No known significant effects or critical hazards.
 Reproductive toxicity : No known significant effects or critical hazards.

**Endocrine disrupting** 

properties

: Not available.

Other information : Not available.

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## **SECTION 12: Ecological information**

#### 12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
propylidynetrimethanol	Acute EC50 13000000 µg/l Fresh water	Daphnia spec Daphnia magna	48 hours
	Acute LC50 14400000 µg/l Marine water	Fish - Cyprinodon variegatus	96 hours
1,2-benzisothiazol-3(2H)-one	Acute EC50 0,067 mg/l	Algae - Pseudokirchneriella subcapitata	72 hours
	Acute EC50 0,11 mg/l	Algae	72 hours
	Acute EC50 0,9893 mg/l Marine water	Crustaceans - Opossum Shrimp	96 hours
	Acute EC50 2,94 mg/l Fresh water	Daphnia spec.	48 hours
	Acute LC50 8 to 13 mg/l	Fish - Alburnus alburnus	96 hours
	Acute LC50 2,18 mg/l Fresh water	Fish	96 hours
	Acute LC50 1,6 to 2,8 ppm Fresh water	Fish - Oncorhynchus mykiss	96 hours
	Chronic NOEC 90 mg/l	Aquatic plants - Phaseolus vulgaris	20 days
	Chronic NOEC 1,2 mg/l	Daphnia spec.	21 days
	Chronic NOEC 0,21 mg/l	Fish	28 days
	Chronic NOEL 0,0403 mg/l	Algae	72 hours
pyrithione zinc	Acute EC50 0,51 µg/l Marine water	Algae - Thalassiosira pseudonana	96 hours
	Acute EC50 38 μg/l Fresh water	Crustaceans - Ilyocypris dentifera	48 hours
	Acute EC50 80 μg/l Fresh water	Crustaceans - Chydorus sphaericus	48 hours
	Acute EC50 8,25 ppb Fresh water	Daphnia spec Daphnia magna	48 hours
	Acute EC50 61 µg/l Fresh water	Daphnia spec Daphnia magna - Nauplii	48 hours
	Acute LC50 2,68 ppb Fresh water	Fish - Pimephales promelas	96 hours
	Chronic EC10 0,36 µg/l Marine water	Algae - Thalassiosira pseudonana	96 hours
	Chronic NOEC 2,7 ppb Marine water	Daphnia spec Daphnia magna	21 days
2-octyl-2H-isothiazol-3-one	Acute EC50 0,32 to 0,834 mg/l Fresh water	Daphnia spec Daphnia magna	48 hours
	Acute IC50 0,084 mg/l	Algae	72 hours
	Acute LC50 0,14 to 0,202 mg/l Fresh water	Fish - Pimephales promelas	96 hours
	Acute LC50 0,0655 to 0,104 mg/l Fresh water	Fish	96 hours
reaction mass of: 5-chloro- 2-methyl-4-isothiazolin- 3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol- 3-one [EC no. 220-239-6] (3: 1)	Acute EC50 0,037 mg/l Fresh water	Algae	48 hours
'/	Acute EC50 0,16 mg/l Fresh water	Daphnia spec.	48 hours
	Acute LC50 0,10 mg/l Fresh water	Fish	96 hours
	Acute NOEC 0,004 mg/l Marine water	Algae	48 hours
	Chronic NOEC 0,18 mg/l	Daphnia spec.	21 days
	Chronic NOEC 0,02 mg/l Fresh water	Fish	38 days
Conclusion/Summany	. Paged on available data the elegation		

**Conclusion/Summary** 

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

#### 12.2 Persistence and degradability

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## **SECTION 12: Ecological information**

Product/ingredient name	Test	Result	Dose	Inoculum
1,2-benzisothiazol-3(2H)-one 2-octyl-2H-isothiazol-3-one	OECD 309 OECD 303A	>80 % - Readily - 4 days	- 0,01 to 0,1 mg/l -	-
reaction mass of: 5-chloro- 2-methyl-4-isothiazolin- 3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol- 3-one [EC no. 220-239-6] (3:	OECD 309 OECD 301D	50 % - Readily - 2 days >60 % - Readily - 28 days	0,01 to 0,1 mg/l  -	-
1)	-	<50 % - 10 days	-	-

#### Conclusion/Summary

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

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
titanium dioxide 1,2-benzisothiazol-3(2H)-one 2-octyl-2H-isothiazol-3-one reaction mass of: 5-chloro- 2-methyl-4-isothiazolin- 3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol- 3-one [EC no. 220-239-6] (3: 1)	Fresh water 2 days, 20°C -	- - - -	Not readily Readily Readily Readily

#### 12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
propylidynetrimethanol	-0,47	<1	low
1,2-benzisothiazol-3(2H)-one	0,64	-	low
pyrithione zinc	0,9	11	low
2-octyl-2H-isothiazol-3-one	2,9	-	low
reaction mass of: 5-chloro-	-0.83 to 0.75	-	low
2-methyl-4-isothiazolin-			
3-one [EC no. 247-500-7]			
and 2-methyl-2H-isothiazol-			
3-one [EC no. 220-239-6] (3:			
1)			

#### 12.4 Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

Mobility : Non-volatile.

#### 12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6 Endocrine disrupting

properties

: No known significant effects or critical hazards.

**12.7 Other adverse effects** : No known significant effects or critical hazards.

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### **SECTION 13: Disposal considerations**

The information in this section contains generic advice and guidance.

Yes.

#### 13.1 Waste treatment methods

#### **Product**

**Methods of disposal** 

The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and nonrecyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

**Hazardous waste European waste catalogue (EWC)** 

Waste code	Waste designation
08 01 15*	aqueous sludges containing paint or varnish containing organic solvents or other hazardous substances

#### **Special precautions**

: This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

## **SECTION 14: Transport information**

	ADR/RID	ADN	IMDG	IATA
14.1 UN number or ID number	Not regulated.	Not regulated.	Not regulated.	Not regulated.
14.2 UN proper shipping name	-	-	-	-
14.3 Transport hazard class(es)	-	-	-	-
14.4 Packing group	-	-	-	-
14.5 Environmental hazards	No.	No.	No.	No.

user

14.6 Special precautions for : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7 Transport in bulk according to IMO instruments

: Not available.

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### **SECTION 15: Regulatory information**

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

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorisation

**Annex XIV** 

None of the components are listed.

Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions : Not applicable.

on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

**Other EU regulations** 

VOC : The provisions of Directive 2004/42/EC on VOC apply to this product. Refer to the

product label and/or technical data sheet for further information.

**VOC for Ready-for-Use** 

**Mixture** 

: 2004/42/EC - IIA/i: 140g/I (2010). <= 140g/I VOC.

Industrial emissions : Not listed (integrated pollution

prevention and control) -

Air

Industrial emissions : Not listed

(integrated pollution prevention and control) -

Water

Ozone depleting substances (1005/2009/EC)

Not listed.

Prior Informed Consent (PIC) (649/2012/EC)

Not listed.

Persistent Organic Pollutants (850/2004/EC)

Not listed.

**Seveso Directive** 

This product is not controlled under the Seveso Directive.

**United Kingdom: Great Britain** 

References : EH40/2005 Workplace exposure limits

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by

Regulation (EU) No. 2020/878

REGULATION (EU) 2016/425 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 9 March 2016 on personal protective equipment and repealing Council

Directive 89/686/EEC

**International regulations** 

**Stockholm Convention on Persistent Organic Pollutants** 

List name	Ingredient name	Status
Not listed.		

**Rotterdam Convention on Prior Informed Consent (PIC)** 

Not listed.

**UNECE Aarhus Protocol on POPs and Heavy Metals** 

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### **SECTION 15: Regulatory information**

List name	Ingredient name	Status
Not listed.		

**CN code** : 3209 90 00 00

**Inventory list** 

Australia : Not determined.

Canada : Not determined.

China : At least one component is not listed.

**Europe** : At least one component is not listed in EINECS but all such components are listed in

ELINCS. Please contact your supplier for information on the inventory status of this

material.

Japan : Japan inventory (CSCL): Not determined.

Japan inventory (ISHL): Not determined.

New Zealand : Not determined.

Philippines : Not determined.

**Republic of Korea** : At least one component is not listed.

Taiwan : Not determined.
Thailand : Not determined.
Turkey : Not determined.
United States : Not determined.
Viet Nam : Not determined.

15.2 Chemical safety

assessment

: This product contains substances for which Chemical Safety Assessments are still

required.

#### **SECTION 16: Other information**

Indicates information that has changed from previously issued version.

Abbreviations and

acronyms

: ATE = Acute Toxicity Estimate

CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No.

1272/2008]

DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level

EUH statement = CLP-specific Hazard statement

N/A = Not available

PBT = Persistent, Bioaccumulative and Toxic PNEC = Predicted No Effect Concentration RRN = REACH Registration Number

SGG = Segregation Group

vPvB = Very Persistent and Very Bioaccumulative

#### Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
STOT RE 2, H373	Expert judgment

Full text of abbreviated H statements

**United Kingdom: Great Britain** 

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#### **SECTION 16: Other information**

Full text of abbreviated	Н
statements	

H301 Toxic if swallowed. H302 Harmful if swallowed. Fatal in contact with skin. H310 H311 Toxic in contact with skin. Causes severe skin burns and eye damage. H314 H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H330 Fatal if inhaled. H360D May damage the unborn child. H361fd Suspected of damaging fertility. Suspected of damaging the unborn child. H372 Causes damage to organs through prolonged or repeated exposure. H373 May cause damage to organs through prolonged or repeated exposure. H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects. H411 Toxic to aquatic life with long lasting effects.

## Full text of classifications [CLP/GHS]

Acute Tox. 2 ACUTE TOXICITY - Category 2
Acute Tox. 3 ACUTE TOXICITY - Category 3
Acute Tox. 4 ACUTE TOXICITY - Category 4

Aquatic Acute 1 SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1 Aquatic LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1

Chronic 1

Aquatic LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2

Chronic 2

Carc. 2 CARCINOGENICITY - Category 2

Eye Dam. 1 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1

Repr. 1B REPRODUCTIVE TOXICITY - Category 1B
Repr. 2 REPRODUCTIVE TOXICITY - Category 2
Skin Corr. 1 SKIN CORROSION/IRRITATION - Category 1
Skin Corr. 1B SKIN CORROSION/IRRITATION - Category 1B
Skin Irrit. 2 SKIN CORROSION/IRRITATION - Category 2

Skin Sens. 1 SKIN SENSITISATION - Category 1
Skin Sens. 1A SKIN SENSITISATION - Category 1A

STOT RE 1 SPECIFIC TARGET ORGAN TOXICITY - REPEATED

**EXPOSURE - Category 1** 

STOT RE 2 SPECIFIC TARGET ORGAN TOXICITY - REPEATED

**EXPOSURE - Category 2** 

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#### **Notice to reader**

IMPORTANT NOTE: The information in this Safety Data Sheet is based on the present state of knowledge and current legislation. It provides guidance on health, safety and environmental aspects of the product and should not be construed as any guarantee of technical performance or suitability for particular applications. The information contained in this data sheet (as may be amended from time to time) is not intended to be exhaustive and is presented in good faith and believed to be correct as of the date on which it is prepared. It is the user's responsibility to verify that this data sheet is current prior to using the product to which it relates. Persons using the information must make their own determinations as to the suitability of the relevant product for their purposes prior to use. Where those purposes are other than as specifically recommended in this safety data sheet, then the user uses the product at their own risk.

MANUFACTURER'S DISCLAIMER: the conditions, methods and factors affecting the handling, storage, application, use and disposal of the product are not under the control and knowledge of the manufacturer. Therefore the manufacturer does not assume responsibility for any adverse events which may occur in the

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#### **SECTION 16: Other information**

handling, storage, application, use, misuse or disposal of the product and, so far as permitted by applicable law, the manufacturer expressly disclaims liability for any and all loss, damages and/or expenses arising out of or in any way connected to the storage, handling, use or disposal of the product. Safe handling, storage, use and disposal are the responsibility of the users. Users must comply with all applicable health and safety laws.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.