

Revision nr. 4

Dated 15/01/2024 Printed on 23/01/2024

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Replaced revision:3 (Dated: 09/01/2023)

Safety Data Sheet

According to Annex II to REACH - Regulation (EU) 2020/878 and to Annex II to UK REACH

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

1.1. Product identifier

Product name Chemical name and synonym PROFESSIONAL DEEPSEA POLISHING ANTIFOULING BLACK PEINTURE ANTISALISSURE CONTENANT RESINE ACRYLIQUE ET COLOPHANE

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

**PEINTURE MARINE** 

Intended use

Identified Uses	Industrial	Professional	Consumer
Paint product for boating	<b>✓</b>	<b>✓</b>	<b>✓</b>
Uses Advised Against			

Consumer - do-it-yourself: spray use

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

UNDERWATER SYSTEMS SAS Name Full address 613, Route des Princes d'Orange District and Country 84190 Gigondas France

> Tel. +33 (0)4 90 65 01 72 infos@underwatersystems.fr

1.4. Emergency telephone number

For urgent inquiries refer to

INRS/ORFILA: Tél: 01 45 42 59 59 http://www.centres-antipoison.net

#### **SECTION 2. Hazards identification**

## 2.1. Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in (EC) Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of (EU) Regulation 2020/878. Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Hazard classification and indication:

Flammable liquid, category 3	H226	Flammable liquid and vapour.
Acute toxicity, category 4	H302	Harmful if swallowed.
Serious eye damage, category 1	H318	Causes serious eye damage.
Specific target organ toxicity - single exposure, category 3	H335	May cause respiratory irritation.
Skin sensitization, category 1	H317	May cause an allergic skin reaction.
Specific target organ toxicity - single exposure, category 3	H336	May cause drowsiness or dizziness.
Hazardous to the aquatic environment, acute toxicity,	H400	Very toxic to aquatic life.
category 1		
Hazardous to the aquatic environment, chronic toxicity,	H410	Very toxic to aquatic life with long lasting effects.
category 1		

## 2.2. Label elements

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.



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Hazard pictograms:









Signal words: Danger

Hazard statements:

**H226** Flammable liquid and vapour.

H302 Harmful if swallowed.

H318 Causes serious eye damage.

**H335** May cause respiratory irritation.

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

**H336** May cause drowsiness or dizziness.

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

**EUH066** Repeated exposure may cause skin dryness or cracking.

**EUH205** Contains epoxy constituents. May produce an allergic reaction.

Precautionary statements:

P501 Dispose of contents/container in accordance with local/regional/national/international regulation

P102 Keep out of reach of children.

P101 If medical advice is needed, have product container or label at hand.

**P210** Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue

rinsing.

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

P333+P313 If skin irritation or rash occurs: Get medical advice / attention.

Contains: DICOPPER OXIDE

Hydrocarbons, C9, aromatics (CAS number: 64742-95-6)

COLOPHONY

**ZINEB** 

Product not intended for uses provided for by Directive 2004/42/EC.



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#### 2.3. Other hazards

On the basis of available data, the product does not contain any PBT or vPvB in percentage ≥ than 0,1%.

The product does not contain substances with endocrine disrupting properties in concentration ≥ 0.1%.

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

#### 3.2. Mixtures

EC 203-603-9

Contains:

Identification	x = Conc. %	Classification (EC) 1272/2008 (CLP)
DICOPPER OXIDE		
INDEX 029-002-00-X	22 ≤ x < 25	Acute Tox. 4 H302, Acute Tox. 4 H332, Eye Dam. 1 H318, Aquatic Acute 1 H400 M=100, Aquatic Chronic 1 H410 M=10
EC 215-270-7		LD50 Oral: 500 mg/kg, LC50 Inhalation mists/powders: 3,34 mg/l/4h
CAS 1317-39-1		
REACH Reg. 01-2119513794-36- XXXX Hydrocarbons, C9, aromatics (CAS number: 64742-95-6) INDEX -	20 ≤ x < 23	Flam. Liq. 3 H226, Asp. Tox. 1 H304, STOT SE 3 H335, STOT SE 3 H336, Aquatic Chronic 2 H411, EUH066
EC 918-668-5		
CAS 128601-23-0		
REACH Reg. 01-2119455851-35- XXXX COLOPHONY		
INDEX 650-015-00-7	16 ≤ x < 19	Skin Sens. 1 H317
EC 232-475-7		
CAS 8050-09-7		
REACH Reg. 01-2119480418-32- XXXX <b>ZINC OXIDE</b>		
INDEX 030-013-00-7	4 ≤ x < 5	Aquatic Acute 1 H400 M=1, Aquatic Chronic 1 H410 M=1
EC 215-222-5		
CAS 1314-13-2		
REACH Reg. 01-2119463881-32- XXXX		
CARBONIO AMORFO		
INDEX -	$3 \le x < 4$	Substance with a community workplace exposure limit.
EC 215-609-9		
CAS 1333-86-4		
REACH Reg. 01-2119384822-32- XXXX <b>ZINEB</b>		
INDEX 006-078-00-2	$2,5 \le x < 3$	Flam. Sol. 2 H228, Repr. 2 H361d, Skin Sens. 1 H317, Aquatic Acute 1 H400 M=1, Aquatic Chronic 1 H410 M=1
EC 235-180-1		• •
CAS 12122-67-7		
2-METHOXY-1-METHYLETHYL		
ACETATE INDEX 607-195-00-7	2≤x< 3	Flam. Liq. 3 H226, STOT SE 3 H336



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CAS 108-65-6

REACH Reg. 01-2119475791-29-

XXXX

Pyrithione zinc

INDEX 613-333-00-7 Repr. 1B H360D, Acute Tox. 2 H330, Acute Tox. 3 H301, STOT RE 1 H372,  $0.25 \le x < 0.3$ 

Eye Dam. 1 H318, Aquatic Chronic 1 H410 M=10

EC 236-671-3 LD50 Oral: 221 mg/kg, LC50 Inhalation mists/powders: 0,14 mg/l/4h

CAS 13463-41-7

2,2'-[(1-methylethylidene)bis(4,1phenyleneoxymethylene)]bisoxiran

INDEX 603-073-00-2  $0.1 \le x < 0.2$ Eye Irrit. 2 H319, Skin Irrit. 2 H315, Skin Sens. 1 H317, Aquatic Chronic 2

H411

EC 216-823-5 Skin Irrit. 2 H315: ≥ 5%, Eye Irrit. 2 H319: ≥ 5%

CAS 1675-54-3

REACH Reg. 01-2119456619-26-

0006

QUARTZ

INDEX -**STOT RE 1 H372**  $0.0149 \le x <$ 

0.0208

EC 238-878-4 CAS 14808-60-7

The full wording of hazard (H) phrases is given in section 16 of the sheet.

## Supplementary information for nanoforms

#### CARBONIO AMORFO

Denomination NERO DI CARBONIO AMORFO

SPECIAL BLACK 4 Other identifier

# Shape

Shape 1: Shape name

> spheroidal Category Shape spherical Aspect ration (x:1) 2,99:1 Fraction of constituent particles in the size range 1-100 nm 100 100 % Shape percentage 20 - 43 D10 nm D50 30 - 87 nm D90 54 - 178 nm 35 - 600 Specific surface area by mass m2/g Method **BET**

Sfere

## Crystallinity

Crystalline structure 1:

Structure amorphous

Percentage 100 %

## Surface functionalisation / treatment

Surface treatments 1:

Surface treatment applied yes The set contain both treated and non-surface treated yes

nanoforms



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Surface treatments external layer hydrophobic

Process description Oxidation

#### Actives substances PT21

Dicopper oxide 23,00 % (368,0 g/L) Zineb 2,50 % (40,0 g/L) Pyrithione zinc 0,25 % (4,0 g/L)

## **SECTION 4. First aid measures**

#### 4.1. Description of first aid measures

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. If problem persists, seek medical advice.

SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Wash contaminated clothing before using it again.

INHALATION: Remove to open air. If the subject stops breathing, administer artificial respiration. Get medical advice/attention immediately.

INGESTION: Get medical advice/attention immediately. Do not induce vomiting. Do not administer anything not explicitly authorised by a doctor.

#### Pyrithione zinc

Poisoning symptoms can appear even after several hours.

In case of malaise consult a doctor.

If inhaled, take the person to fresh air and call a doctor immediately.

In case of skin contact, immediately remove contaminated clothing and shoes and wash it off with plenty of soap and water.

In case of contact with eyes, rinse with plenty of water also under the eyelids for at least 15 minutes and call a doctor / poison control center.

If ingested, rinse the mouth with plenty of water (if the person is conscious). Do not induce vomiting. If vomiting occurs, keep head down to prevent vomit from going into the lungs. contact a physician / poison control center immediately.

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

Specific information on symptoms and effects caused by the product are unknown.

#### Pyrithione zinc

In case of contact, it can cause permanent eye damage.

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

Pyrithione zinc

Treat symptomatically.

# **SECTION 5. Firefighting measures**

#### 5.1. Extinguishing media

## SUITABLE EXTINGUISHING EQUIPMENT

Extinguishing substances are: carbon dioxide, foam, chemical powder. For product loss or leakage that has not caught fire, water spray can be used to disperse flammable vapours and protect those trying to stem the leak.

UNSUITABLE EXTINGUISHING EQUIPMENT

Do not use jets of water. Water is not effective for putting out fires but can be used to cool containers exposed to flames to prevent explosions.

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

#### HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Excess pressure may form in containers exposed to fire at a risk of explosion. Do not breathe combustion products.

## 5.3. Advice for firefighters

## GENERAL INFORMATION

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.



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#### SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

#### **SECTION 6. Accidental release measures**

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

Block the leakage if there is no hazard.

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

Send away individuals who are not suitably equipped. Use explosion-proof equipment. Eliminate all sources of ignition (cigarettes, flames, sparks, etc.) from the leakage site.

## 6.2. Environmental precautions

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

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

Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.

Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

#### 6.4. Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13.

# **SECTION 7. Handling and storage**

## 7.1. Precautions for safe handling

Keep away from heat, sparks and naked flames; do not smoke or use matches or lighters. Without adequate ventilation, vapours may accumulate at ground level and, if ignited, catch fire even at a distance, with the danger of backfire. Avoid bunching of electrostatic charges. When performing transfer operations involving large containers, connect to an earthing system and wear antistatic footwear. Vigorous stirring and flow through the tubes and equipment may cause the formation and accumulation of electrostatic charges. In order to avoid the risk of fires and explosions, never use compressed air when handling. Open containers with caution as they may be pressurised. Do not eat, drink or smoke during use. Avoid leakage of the product into the environment.

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

Store only in the original container. Store the containers sealed, in a well ventilated place, away from direct sunlight. Store in a cool and well ventilated place, keep far away from sources of heat, naked flames and sparks and other sources of ignition. Keep containers away from any incompatible materials, see section 10 for details.

## 2-METHOXY-1-METHYLETHYL ACETATE

Store in an inert atmosphere, sheletered from moisture because it hydrolises easily.

Storage class TRGS 510 (Germany): 3

## 7.3. Specific end use(s)

Information not available

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



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#### 8.1. Control parameters

#### Regulatory references:

DEU Deutschland Technischen Regeln für Gefahrstoffe (TRGS 900) - Liste der Arbeitsplatzgrenzwerte und Kurzzeitwerte. MAK- und BAT-Werte-Liste 2020, Ständige Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe, Mitteilung 56 ESP Límites de exposición profesional para agentes químicos en España 2021 Valeurs limites d'exposition professionnelle aux agents chimiques en France. ED 984 - INRS España FRA France Decreto Legislativo 9 Aprile 2008, n.81 ITA Italia NLD Nederland Arbeidsomstandighedenregeling. Lijst van wettelijke grenswaarden op grond van de artikelen 4.3, eerste lid, en 4.16, eerste lid, van het Arbeidsomstandighedenbesluit Decreto-Lei n.º 1/2021 de 6 de janeiro, valores-limite de exposição profissional indicativos para os agentes químicos. Decreto-Lei n.º 35/2020 de 13 de julho, proteção dos trabalhadores contra os riscos ligados à PRT Portugal exposição durante o trabalho a agentes cancerígenos ou mutagénicos
Rozporządzenie ministra rozwoju, pracy i technologii z dnia 18 lutego 2021 r. Zmieniające rozporządzenie POL Polska w sprawie najwyższych dopuszczalnych stężeń i natężeń czynników szkodliwych dla zdrowia w środowisku pracy ROU România Hotărârea nr. 53/2021 pentru modificarea hotărârii guvernului nr. 1.218/2006, precum și pentru modificarea și completarea hotărârii guvernului nr. 1.093/2006 EH40/2005 Workplace exposure limits (Fourth Edition 2020) **GBR** United Kingdom ΕU OEL EU

Directive (EU) 2022/431; Directive (EU) 2019/1831; Directive (EU) 2019/130; Directive (EU) 2019/983; Directive (EU) 2017/2398; Directive (EU) 2017/164; Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC; Directive 98/24/EC; Directive 91/322/EEC.

TLV-ACGIH **ACGIH 2022** 

DICOPPER OXIDE							
Threshold Limit Value	Country	TWA/8h		STEL/15min	STEL/15min		 S
		mg/m3	ppm	mg/m3	ppm		
MAK	DEU	0,01		0,02			
VLA	ESP	0,01				RESP	Como Cu
NDS/NDSCh	POL	0,2					Na Cu
WEL	GBR	1		2			As Cu
Predicted no-effect conce	entration - PNEC						
Normal value in fresh wat	ter			7,8	ŀ	ıl/g	
Normal value in marine w	ater			5,2	ŀ	ıl/g	
Normal value for fresh wa	ater sediment			87	r	mg/kg	
Normal value for marine v	water sediment			676	r	mg/kg	
Normal value of STP mice	roorganisms			0,23	r	mg/l	
Normal value for the terre	estrial compartment			65	r	mg/kg	

#### Health - Derived no-effect level - DNEL / DMEL Effects on Effects on consumers workers Route of exposure Acute local Acute systemic Chronic local Chronic Acute local Acute Chronic local Chronic systemic systemic systemic Oral 82 µg/kg 41 µg/kg bw/day bw/day NPI NPI NPI NPI Inhalation NPI 1 mg/m3 1 mg/m3 137 mg/kg NPI NPI NPI NPI Skin bw/d

Hydrocarbons, C9, aromatics (CAS number: 64742-95-6)

Predicted no-effect concentration - PNEC	
Normal value in fresh water	NPI
Normal value in marine water	NPI
Normal value for fresh water sediment	NPI
Normal value for marine water sediment	NPI
Normal value for water, intermittent release	NPI



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Normal value of STP microorganisms				NPI				
Normal value for the food ch	nain (secondary poison	ning)		NPI				
Normal value for the terrestr	ial compartment			NPI				
Normal value for the atmosp	here			NPI				
Health - Derived no-effo	ect level - DNEL / I Effects on consumers	OMEL			Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				11 mg/kg bw/d		.,		
Inhalation				32 mg/m3				150 mg/m3
Skin				11 mg/kg bw/d				25 mg/kg bw/d
CALCIUM CARBONATE Threshold Limit Value	E							
Туре	Country	TWA/8h		STEL/15min		Remarks Observa		
		mg/m3	ppm	mg/m3	ppm			
VLEP	FRA	10						
NDS/NDSCh	POL	10				INHAL		
Predicted no-effect concentr	ration - PNEC							
COLOPHONY								
Threshold Limit Value	Country	T\\/\\ /0h		STEL /15min		Domorko		
Threshold Limit Value	Country	TWA/8h	nnm	STEL/15min	nom	Remarks Observa		
Threshold Limit Value Type	ŕ	mg/m3	ppm	STEL/15min mg/m3	ррт			
Threshold Limit Value Type TLV	ROU	mg/m3 0,1	ppm	mg/m3	ppm			
Threshold Limit Value Type  TLV  WEL	ŕ	mg/m3 0,1 0,05	ppm		ppm			
Threshold Limit Value Type  TLV  WEL TLV-ACGIH	ROU GBR	mg/m3 0,1	ppm	mg/m3	ppm			
Threshold Limit Value Type  TLV  WEL  TLV-ACGIH  Predicted no-effect concentr	ROU GBR	mg/m3 0,1 0,05	ppm	mg/m3 0,15		Observa		
Threshold Limit Value Type  TLV  WEL  TLV-ACGIH  Predicted no-effect concentr  Normal value in fresh water	ROU GBR ration - PNEC	mg/m3 0,1 0,05	ppm	mg/m3 0,15	mg	Observa		
Threshold Limit Value Type  TLV  WEL  TLV-ACGIH  Predicted no-effect concentr  Normal value in fresh water	ROU GBR ration - PNEC	mg/m3 0,1 0,05	ppm	mg/m3 0,15	mg mg	Observa		
Threshold Limit Value Type  TLV  WEL  TLV-ACGIH  Predicted no-effect concentr  Normal value in fresh water  Normal value in marine water  Normal value for fresh water	ROU GBR ration - PNEC	mg/m3 0,1 0,05	ppm	0,15 0	mg mg mg	Observa		
TLV WEL TLV-ACGIH Predicted no-effect concentr Normal value in fresh water Normal value for fresh water Normal value for fresh water	ROU GBR ration - PNEC er r sediment	mg/m3 0,1 0,05	ppm	0,15 0 0 0 0 0,02	mg mg mg	Observa		
Threshold Limit Value Type  TLV  WEL  TLV-ACGIH  Predicted no-effect concentr  Normal value in fresh water  Normal value for fresh water  Normal value for fresh water  Normal value for marine water  Normal value for marine water	ROU GBR ration - PNEC er r sediment er sediment er sediment	mg/m3 0,1 0,05 0,001	ppm	0,15 0 0 0 0 0,02	mg mg mg mg	Observa		
Threshold Limit Value Type  TLV  WEL  TLV-ACGIH  Predicted no-effect concentr  Normal value in fresh water  Normal value in marine water  Normal value for fresh water  Normal value for fresh water  Normal value for marine wat  Normal value for marine wat  Normal value for the food ch	ROU GBR ration - PNEC er r sediment eer sediment organisms nain (secondary poison	mg/m3 0,1 0,05 0,001	ppm	0,15  0 0 0 0 0,02 0 1000	mg mg mg mg	Observa		
Threshold Limit Value Type  TLV  WEL  TLV-ACGIH  Predicted no-effect concentr  Normal value in fresh water  Normal value for the food ch  Health - Derived no-effet  Route of exposure	ROU GBR  ration - PNEC  er r sediment er sediment organisms nain (secondary poison ect level - DNEL / E effects on	mg/m3 0,1 0,05 0,001	ppm  Chronic local	0,15  0 0 0 0,02 0 1000 0 Chronic systemic	mg mg mg mg	Observa		Chronic
Threshold Limit Value Type  TLV  WEL  TLV-ACGIH  Predicted no-effect concentr  Normal value in fresh water  Normal value in marine wate  Normal value for fresh water  Normal value for marine wat  Normal value for marine wat  Normal value for the food ch  Health - Derived no-effe	ROU GBR  ration - PNEC  er r sediment er sediment erganisms nain (secondary poison ect level - DNEL / E effects on consumers	mg/m3 0,1 0,05 0,001  ming)  DMEL		0,15  0 0 0 0,02 0 1000 0	mg mg mg mg	Observa	tions	



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уре	Country	TWA/8h		STEL/15min		Remarks		
		mg/m3	ppm	mg/m3	ppm	Observat	tions	
MAK	DEU	2	••	4		INHAL		
MAK	DEU	0,1		0,4		RESP		
VLA	ESP	2		10				
VLEP	FRA	5						
NDS/NDSCh	POL	5		10		INHAL	Na Zn	
TLV	ROU	5		10			Fumuri	
TLV-ACGIH		2		10		RESP		
Predicted no-effect concentrat	ion - PNEC			•				
Normal value in fresh water				14,4	μg/	<u>′</u> 1		
Normal value in marine water				7,2	µg/			
Normal value for fresh water s	ediment			146,9	· -	ı/kg/d		
Normal value for marine water				162,2		/kg/d /kg/d		
Normal value of STP microorg				100	μg/			
Normal value for the terrestrial				831	· -	ı/kg/d		
				NPI		/kg/u		
Normal value for the atmosphe  Health - Derived no-effect		DMEI		INPI				
	Effects on consumers	DIVIEL			Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral		NPI		830 µg/kg bw/d		Cyclonic		<u> </u>
Inhalation	NPI	NPI	NPI	2,5 mg/m3	NPI NPI	NPI	NPI	5 mg/m3
Skin	NPI	NPI	NPI	83 mg/kg bw/d	NPI	NPI	NPI	83 mg/kg bw/d
CARBONIO AMORFO Threshold Limit Value								
Туре	Country	TWA/8h		STEL/15min		Remarks		
		mg/m3	ppm	mg/m3	ppm	Observat	tions	
OFI	EU	3				RESP		
OEL								
	ion - PNEC							
Predicted no-effect concentrat	ion - PNEC			1	mo	1/1		
Predicted no-effect concentrat  Normal value in fresh water	ion - PNEC			1 100	mg ua/			
Predicted no-effect concentrat Normal value in fresh water Normal value in marine water				100	hā\ wā			
Predicted no-effect concentrat Normal value in fresh water Normal value in marine water Normal value for fresh water s	ediment			100 NPI				
Predicted no-effect concentrat Normal value in fresh water Normal value in marine water Normal value for fresh water s Normal value for marine water	ediment sediment			100 NPI NPI	µg/	L L		
Predicted no-effect concentrat Normal value in fresh water Normal value in marine water Normal value for fresh water s Normal value for marine water Normal value for water, interm	ediment sediment ittent release	sin a)		100 NPI NPI 1		L L		
Predicted no-effect concentrat Normal value in fresh water Normal value in marine water Normal value for fresh water s Normal value for marine water Normal value for water, interm Normal value for the food chai	ediment sediment ittent release n (secondary poisor	ning)		NPI NPI 1 NPI	µg/	L L		
Predicted no-effect concentrat Normal value in fresh water Normal value in marine water Normal value for fresh water s Normal value for marine water Normal value for water, interm Normal value for the food chai Normal value for the terrestrial	ediment sediment ittent release n (secondary poisor	ning)		100 NPI NPI 1 NPI NPI NPI	µg/	L L		
Predicted no-effect concentrat Normal value in fresh water Normal value in marine water Normal value for fresh water s Normal value for marine water Normal value for water, interm Normal value for the food chai Normal value for the terrestrial	ediment sediment ittent release n (secondary poisor			NPI NPI 1 NPI	µg/	L L		
Predicted no-effect concentrat Normal value in fresh water Normal value in marine water Normal value for fresh water s Normal value for marine water	ediment sediment ittent release n (secondary poisor compartment ere et level - DNEL / I			100 NPI NPI 1 NPI NPI NPI	µg/ mg	L L		
Predicted no-effect concentrat Normal value in fresh water Normal value in marine water Normal value for fresh water s Normal value for marine water Normal value for water, interm Normal value for the food chai Normal value for the terrestrial	ediment sediment ittent release n (secondary poisor compartment ere		Chronic local	100  NPI  NPI  1  NPI  NPI  NPI  NPI  Chronic	µg/	/L Acute	Chronic local	Chronic
Predicted no-effect concentrat Normal value in fresh water Normal value in marine water Normal value for fresh water s Normal value for marine water Normal value for water, interm Normal value for the food chai Normal value for the terrestrial Normal value for the atmosphe Health - Derived no-effect	ediment sediment ittent release n (secondary poisor compartment ere it level - DNEL / I Effects on consumers	DMEL	Chronic local	100 NPI NPI 1 NPI NPI NPI NPI	mg mg	/L //I	Chronic local	Chronic



Health - Derived no-effect level - DNEL / DMEL

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уре	Country	TWA/8h		STEL/15min		Remarks Observat			
		mg/m3	ppm	mg/m3	ppm				
GW	DEU	270	50	270	50				
ЛАК	DEU	270	50	270	50				
VLA	ESP	275	50	550	100	SKIN			
VLEP	FRA	275	50	550	100	SKIN			
/LEP	ITA	275	50	550	100	SKIN			
TGG	NLD	550							
VLE	PRT	275	50	550	100	SKIN			
NDS/NDSCh	POL	260		520		SKIN			
TLV	ROU	275	50	550	100	SKIN			
WEL	GBR	274	50	548	100	SKIN			
OEL	EU	275	50	550	100	SKIN			
Predicted no-effect concentration	n - PNEC								
Normal value in fresh water				0,635	mg	<u>1</u> /l			
Normal value in marine water				0,0635	mg	<b>1</b> /l			
Normal value for fresh water see	diment			3,29	mg	ı/kg			
Normal value for marine water s	ediment			0,329	mg/kg				
Normal value of STP microorga	nisms			100	mg	<b>1</b> /l			
Normal value for the food chain	(secondary poisor	ning)		NPI					
Normal value for the terrestrial of	compartment			0,29	,29 mg/kg				
Normal value for the atmospher	е			NPI					
Health - Derived no-effect	Effects on	OMEL			Effects on workers				
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic	Acute local	Acute	Chronic local	Chronic	
Oral	500 mg/kg bw/	/d	36 mg/kg bw/d	systemic 1,67 mg/kg		systemic		systemic	
Inhalation	NPI	NPI	33 mg/m3	33 mg/m3	550 mg/m3	NPI	NPI	275 mg/m3	
Skin	NPI	NPI	NPI	320 mg/kg bw/d	NPI	NPI	NPI	796 mg/kg bw/d	
Pyrithione zinc Threshold Limit Value									
Гуре	Country	TWA/8h		STEL/15min		Remarks			
		mg/m3	ppm	mg/m3	ppm	Observat	ions		
OEL	EU	2,5		<u> </u>					
Predicted no-effect concentration		,-							
Normal value in fresh water				90	ng	/I			
Normal value in marine water				90	ng,				
Normal value for fresh water see	diment			0,0095		ı/kg/d			
Normal value for marine water s				0,0095		ı/kg/d			
Normal value of STP microorga				0,01	mg				
	compartment			1,02		<sub>J</sub> /kg/d			



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	Effects on				Effects on			
	consumers				workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic	Acute local	Acute	Chronic local	Chronic
				systemic		systemic		systemic
Skin							VND	0.01 mg/kg/d

2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)] Predicted no-effect concentration - PNEC	bisoxirane		
Normal value in fresh water	0,006	mg/l	
Normal value in marine water	0,001	mg/l	
Normal value for fresh water sediment	341	μg/kg/dw	
Normal value for marine water sediment	34,1	μg/kg/dw	
Normal value of STP microorganisms	10	mg/l	
Normal value for the food chain (secondary poisoning)	11	mg/kg	
Normal value for the atmosphere	NPI		

Health - Derived no-ef	fect level - DNEL / [	OMEL						
	Effects on				Effects on			
	consumers				workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral		NPI		500 μg/kg bw/day				
Inhalation		NPI	0,012 mg/l	870 mg/m3		NPI		4,93 mg/m3
Skin		NPI		89.3 μg/kg bw/day	NPI	NPI		750 µg/kg bw/day

QUARTZ						
Threshold Limit Value						
Туре	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
VLA	ESP		0,05			RESP
VLEP	FRA	0,1				RESP
VLEP	ITA	0,1				RESP
TGG	NLD	0,075				RESP
VLE	PRT	0,025				RESP
NDS/NDSCh	POL	0,1				RESP
TLV	ROU	0,1				RESP
OEL	EU	0,1				RESP
TLV-ACGIH		0,025				RESP

#### Legend:

(C) = CEILING; INHAL = Inhalable Fraction; RESP = Respirable Fraction; THORA = Thoracic Fraction.

VND = hazard identified but no DNEL/PNEC available ; NEA = no exposure expected ; NPI = no hazard identified ; LOW = low hazard ; MED = medium hazard ; HIGH = high hazard.

TLV of solvent mixture: 534 mg/m3

## 8.2. Exposure controls

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.

When choosing personal protective equipment, ask your chemical substance supplier for advice.

Personal protective equipment must be CE marked, showing that it complies with applicable standards.



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Provide an emergency shower with face and eye wash station.

#### HAND PROTECTION

Protect hands with category III work gloves.

The following should be considered when choosing work glove material (see standard EN 374): compatibility, degradation, failure time and permeability. The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

#### SKIN PROTECTION

Wear category II professional long-sleeved overalls and safety footwear (see Regulation 2016/425 and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

Consider the appropriateness of providing antistatic clothing in the case of working environments in which there is a risk of explosion.

#### EYE PROTECTION

Wear airtight protective goggles (see standard EN 166).

In the presence of risks of exposure to splashes or squirts during work, adequate mouth, nose and eye protection should be used to prevent accidental absorption.

#### RESPIRATORY PROTECTION

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, wear a mask with a type AX filter, whose limit of use will be defined by the manufacturer (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required.

Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.

If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear opencircuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

## ENVIRONMENTAL EXPOSURE CONTROLS

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

Product residues must not be indiscriminately disposed of with waste water or by dumping in waterways.

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

## 9.1. Information on basic physical and chemical properties

Properties	Value	Information
Appearance	liquid	
Colour	black	
Odour	caratteristico di nafta petrolio	
Melting point / freezing point	not available	
Initial boiling point	> 35 °C	
Flammability	flammable liquid	
Lower explosive limit	not available	
Upper explosive limit	not available	

Flash point 39 °C Method:Abel-Pensky Closed Cup

Auto-ignition temperature not available

Decomposition temperature not available

pH not available Reason for missing data:substance/mixture is

non-soluble (in water)

Kinematic viscosity >20,5 mm2/sec (40°C)

Dynamic viscosity 2'15"  $\pm$  15" Method:Coupe Ford Ø 4 Temperature: 20 °C



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Solubility insoluble in water
Partition coefficient: n-octanol/water not available

Vapour pressure 1,59 mmHg

Density and/or relative density  $1600 \pm 50 \text{ g/L}$  kg/l Relative vapour density not available Particle characteristics not applicable

Method:OECD 109

#### 9.2. Other information

9.2.1. Information with regard to physical hazard classes

Information not available

9.2.2. Other safety characteristics

Total solids (250°C / 482°F) 77,74 % Method: Valore calcolato

VOC (Directive 2010/75/EÚ) 22,26 % - 356,14 g/litre VOC (volatile carbon) 19,25 % - 308,01 g/litre

# **SECTION 10. Stability and reactivity**

## 10.1. Reactivity

There are no particular risks of reaction with other substances in normal conditions of use.

CALCIUM CARBONATE

Decomposes at temperatures above 800°C/1472°F.

2-METHOXY-1-METHYLETHYL ACETATE

Stable in normal conditions of use and storage.

Con l'aria può dare lentamente perossidi che esplodono per aumento di temperatura.

## 10.2. Chemical stability

The product is stable in normal conditions of use and storage.

# 10.3. Possibility of hazardous reactions

The vapours may also form explosive mixtures with the air.

2-METHOXY-1-METHYLETHYL ACETATE

May react violently with: oxidising substances, strong acids, alkaline metals.

#### 10.4. Conditions to avoid

Avoid overheating. Avoid bunching of electrostatic charges. Avoid all sources of ignition.

Pyrithione zinc

Evitare l'esposizione a: luce solare diretta temperature estremamente elevate o estremamente basse

10.5. Incompatible materials



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CALCIUM CARBONATE

Incompatible with: acids.

2-METHOXY-1-METHYLETHYL ACETATE

Incompatible with: oxidising substances, strong acids, alkaline metals.

Pyrithione zinc

Keep away from: strong oxidising agents, strong acids, strong alkalis.

#### 10.6. Hazardous decomposition products

In the event of thermal decomposition or fire, gases and vapours that are potentially dangerous to health may be released.

CALCIUM CARBONATE

May develop: calcium oxides,carbon oxides.

Pyrithione zinc

Può sviluppare: anidride carbonica monossido di carbonio composti dello zolfo azotoguando

## **SECTION 11. Toxicological information**

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification.

It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

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

Metabolism, toxicokinetics, mechanism of action and other information

## 2-METHOXY-1-METHYLETHYL ACETATE

La principale via di entrata è quella cutanea, mentre quella respiratoria è meno importante, data la bassa tensione di vapore del prodotto.

Information on likely routes of exposure

2-METHOXY-1-METHYLETHYL ACETATE

LAVORATORI: inalazione; contatto con la cute.

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

#### 2-METHOXY-1-METHYLETHYL ACETATE

Al di sopra di 100 ppm si ha irritazione delle mucose oculari, nasali e orofaringee. A 1000 ppm si notano turbe nell'equilibrio e irritazione severa agli occhi. Gli esami clinici e biologici praticati sui volontari esposti non hanno rivelato anomalie. L'acetato produce maggiore irritazione cutanea ed oculare per contatto diretto. Non vengono riportati effetti cronici sull'uomo (INCR, 2010).

Interactive effects

| |Information not available

ACUTE TOXICITY



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ATE (Inhalation - mists / powders) of the mixture: > 5 mg/l ATE (Oral) of the mixture: 1947,14 mg/kg

ATE (Dermal) of the mixture: Not classified (no significant component)

DICOPPER OXIDE

 LD50 (Dermal):
 > 2000 mg/kg

 LD50 (Oral):
 500 mg/kg

 LC50 (Inhalation mists/powders):
 3,34 mg/l/4h

CALCIUM CARBONATE

LD50 (Oral): 6450 mg/kg Rat

COLOPHONY

LD50 (Dermal): > 2000 mg/kg RAT LD50 (Oral): > 2800 mg/kg RAT

ZINC OXIDE

 LD50 (Dermal):
 > 2000 mg/kg RAT

 LD50 (Oral):
 > 5000 mg/kg RAT

 LC50 (Inhalation vapours):
 > 5,7 ppm/4h RAT

CARBONIO AMORFO

LD50 (Oral): > 8000 mg/kg RATTO

Vinyl chloride copolymère

LD50 (Oral): > 2000 mg/kg RATTO

ZINEB

 LD50 (Dermal):
 > 2500 mg/kg Rat

 LD50 (Oral):
 > 1000 mg/kg Rat

 LC50 (Inhalation mists/powders):
 > 5 mg/l/1h (air) Rat

2-METHOXY-1-METHYLETHYL ACETATE

 LD50 (Dermal):
 > 3160 mg/kg Rat

 LD50 (Oral):
 8500 mg/kg Rat

 LC50 (Inhalation vapours):
 6193 mg/m3/4h Ratto

CLOROPARAFFINA

 $\begin{array}{ll} \text{LD50 (Dermal):} & > 4000 \text{ mg/kg RATTO} \\ \text{LD50 (Oral):} & > 10000 \text{ mg/kg RATTO} \\ \end{array}$ 

ZEOLITE

 LD50 (Dermal):
 > 2000 mg/kg Rabbit

 LD50 (Oral):
 > 5000 mg/kg Rat

 LC50 (Inhalation mists/powders):
 > 15 mg/l/1h Rat

Pyrithione zinc



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LD50 (Dermal): > 2000 mg/kg Coniglio

LD50 (Oral): 221 mg/kg Ratto

LC50 (Inhalation mists/powders): 0,14 mg/l/4h Ratto - maschio e femmina

2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane

 LD50 (Dermal):
 > 23000 mg/kg CONIGLIO

 LD50 (Oral):
 > 15000 mg/kg RATTO

QUARTZ

LD50 (Oral): > 500 mg/kg

SKIN CORROSION / IRRITATION

Repeated exposure may cause skin dryness or cracking.

SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye damage

RESPIRATORY OR SKIN SENSITISATION

Sensitising for the skin

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

STOT - SINGLE EXPOSURE

May cause respiratory irritation

May cause drowsiness or dizziness

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class Viscosity: >20,5 mm2/sec (40°C)

## 11.2. Information on other hazards

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with human health effects under evaluation.



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# **SECTION 12. Ecological information**

This product is dangerous for the environment and highly toxic for aquatic organisms. In the long term, it have negative effects on aquatic environment.

#### 12.1. Toxicity

**COLOPHONY** 

 LC50 - for Fish
 > 60,3 mg/l/96h

 EC50 - for Crustacea
 > 911 mg/l/48h

 EC50 - for Algae / Aquatic Plants
 > 1000 mg/l/72h

**CALCIUM CARBONATE** 

EC50 - for Algae / Aquatic Plants > 14 mg/l/72h

2-METHOXY-1-METHYLETHYL ACETATE

LC50 - for Fish > 100 mg/l/96h Oncorhynchus mykiss EC50 - for Crustacea > 408 mg/l/48h Daphnia magna

EC50 - for Algae / Aquatic Plants > 100 mg/l/72h

Chronic NOEC for Fish 47,5 mg/l Oncothynchus mykiss
Chronic NOEC for Crustacea > 99 mg/l Daphnia magna

Chronic NOEC for Algae / Aquatic Plants > 999 mg/l Selenastrum capricornutum

**DICOPPER OXIDE** 

LC50 - for Fish 0,0384 mg/l/96h Pimephales promelas EC50 - for Crustacea 0,0038 mg/l/48h Daphnia similis

EC50 - for Algae / Aquatic Plants 0,0238 mg/l/72h Pseudokirchneriella subcapitata

Chronic NOEC for Fish 0,0116 mg/l Oncorhynchus mykiss
Chronic NOEC for Crustacea 0,0126 mg/l Daphnia magna

Chronic NOEC for Algae / Aquatic Plants 0,0029 mg/l Phaeodactylum tricornutumto

ZINC OXIDE

LC50 - for Fish 1,1 mg/l/96h Oncorhynchus mykiss EC50 - for Crustacea 1,7 mg/l/48h Daphnia magna

EC50 - for Algae / Aquatic Plants 0,14 mg/l/72h Pseudokirchnerella subcapitata

Chronic NOEC for Fish 0,53 mg/l
Chronic NOEC for Algae / Aquatic Plants 0,024 mg/l

**ZINEB** 

LC50 - for Fish > 7,2 mg/l/96h Lepomis macrochirus (Bluegill)
EC50 - for Crustacea > 0,97 mg/l/48h Daphnia magna (Water flea)

Hydrocarbons, C9, aromatics (CAS number:

64742-95-6)

EC50 - for Algae / Aquatic Plants  $> 290 \mu g/l/72h 290 - 420 \mu g/L$ 

ZEOLITE



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2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane

LC50 - for Fish > 2 mg/l/96h PESCIEC50 - for Crustacea > 1,8 mg/l/48h DAFNIE

EC50 - for Algae / Aquatic Plants > 11 mg/l/72h EC10 for Algae / Aquatic Plants > 4,2 mg/l/72h

CARBONIO AMORFO

LC50 - for Fish > 1000 mg/l/96h Leuciscus idus

EC50 - for Algae / Aquatic Plants > 10000 mg/l/72h Scenedesmus subspicatus ; OCSE 201

Chronic NOEC for Fish > 1000 mg/l Leuciscus idus

Chronic NOEC for Algae / Aquatic Plants > 10000 mg/l Scenedesmus subspicatus ; OCSE 201

Pyrithione zinc

LC50 - for Fish > 0,0026 mg/l/96h Cavedano americano
EC50 - for Algae / Aquatic Plants 0,00088 mg/l/72h Skeletonema costatum
EC10 for Algae / Aquatic Plants 0,00068 mg/l/72h Skeletonema costatum

#### 12.2. Persistence and degradability

COLOPHONY

Solubility in water 0,1 - 100 mg/l

Rapidly degradable

CALCIUM CARBONATE

Solubility in water 0,1 - 100 mg/l

2-METHOXY-1-METHYLETHYL ACETATE

Solubility in water > 10000 mg/l

Rapidly degradable DICOPPER OXIDE

Solubility in water 0,639 mg/l

NOT rapidly degradable

ZINC OXIDE

Solubility in water  $> 1.2 \text{ mg/l } 1.2 - 2.9 \text{ mg/L} @ 20 ^{\circ}\text{C}$ 

NOT rapidly degradable

Hydrocarbons, C9, aromatics (CAS number:

64742-95-6)

Solubility in water > 93 mg/l

Rapidly degradable

2,2'-[(1-methylethylidene)bis(4,1-

phenyleneoxymethylene)]bisoxirane

Solubility in water > 6,9 mg/l 0,1 - 100

NOT rapidly degradable

CARBONIO AMORFO

Solubility in water > 1 mg/l

Pyrithione zinc



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Rapidly degradable

#### 12.3. Bioaccumulative potential

COLOPHONY

Partition coefficient: n-octanol/water 3
BCF 56,23

2-METHOXY-1-METHYLETHYL ACETATE

Partition coefficient: n-octanol/water 1,2

ZINC OXIDE

Partition coefficient: n-octanol/water < 4
BCF > 175

**ZINEB** 

Partition coefficient: n-octanol/water > 1,3

BCF > 225 μg/l Oncorhynchus mykiss (rainbow trout)

2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane

Partition coefficient: n-octanol/water > 3242 Kow 3.242 @ 25 °C

BCF 31

Pyrithione zinc

Partition coefficient: n-octanol/water < 4

# 12.4. Mobility in soil

COLOPHONY

Partition coefficient: soil/water 3,7289

2,2'-[(1-methylethylidene)bis(4,1-

phenyleneoxymethylene)]bisoxirane

Partition coefficient: soil/water 2,65

#### 12.5. Results of PBT and vPvB assessment

On the basis of available data, the product does not contain any PBT or vPvB in percentage ≥ than 0,1%.

#### 12.6. Endocrine disrupting properties

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with environmental effects under evaluation.

#### 12.7. Other adverse effects

Information not available

# **SECTION 13. Disposal considerations**



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#### 13.1. Waste treatment methods

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations. Waste transportation may be subject to ADR restrictions.

## CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

# **SECTION 14. Transport information**

#### 14.1. UN number or ID number

ADR / RID, IMDG, IATA: 1263

#### 14.2. UN proper shipping name

ADR / RID: PAINT OF PAINT RELATED MATERIAL IMDG: PAINT OF PAINT RELATED MATERIAL IATA: PAINT OF PAINT RELATED MATERIAL

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

ADR / RID: Class: 3 Label: 3

IMDG: Class: 3 Label: 3

IATA: Class: 3 Label: 3



## 14.4. Packing group

ADR / RID, IMDG, IATA:

# 14.5. Environmental hazards

ADR / RID: Environmentally

Hazardous

IMDG: Marine Pollutant

IATA: NO

For Air transport, environmentally hazardous mark is only mandatory for UN 3077 and UN 3082.

## 14.6. Special precautions for user

ADR / RID: HIN - Kemler: 30 Limited Tunnel Quantities: 5 restriction

Special provision: 163, 367, 650

IMDG: EMS: F-E, <u>S-E</u> Limited

Quantities: 5

code: (D/E)



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IATA: Cargo:

Maximum quantity: 220

Passengers: Maximum quantity: 60 L

366
Packaging instructions:

Packaging instructions:

Special provision: A3, A72, A192

355

14.7. Maritime transport in bulk according to IMO instruments

Information not relevant

# **SECTION 15. Regulatory information**

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

Seveso Category - Directive 2012/18/EU: P5c-E1

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006

<u>Product</u>

Point 3 - 40

Contained substance

Point 75

Regulation (EU) 2019/1148 - on the marketing and use of explosives precursors

not applicable

Substances in Candidate List (Art. 59 REACH)

On the basis of available data, the product does not contain any SVHC in percentage ≥ than 0,1%.

Substances subject to authorisation (Annex XIV REACH)

None

Substances subject to exportation reporting pursuant to Regulation (EU) 649/2012:

ZINEB

Substances subject to the Rotterdam Convention:

None

Substances subject to the Stockholm Convention:

None

Healthcare controls

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.



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German regulation on the classification of substances hazardous to water (AwSV, vom 18. April 2017)

WGK 3: Severe hazard to waters

#### 15.2. Chemical safety assessment

A chemical safety assessment has been performed for the following contained substances

DICOPPER OXIDE

2-METHOXY-1-METHYLETHYL ACETATE

#### **SECTION 16. Other information**

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

Flam. Liq. 3 Flammable liquid, category 3
Flam. Sol. 2 Flammable solid, category 2
Repr. 1B Reproductive toxicity, category 1B
Repr. 2 Reproductive toxicity, category 2
Acute Tox. 2 Acute toxicity, category 2

Acute Tox. 2 Acute toxicity, category 2
Acute Tox. 3 Acute toxicity, category 3
Acute Tox. 4 Acute toxicity, category 4

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

Asp. Tox. 1 Aspiration hazard, category 1

Eye Dam. 1 Serious eye damage, category 1

Eye Irrit. 2 Eye irritation, category 2

Eye Irrit. 2 Eye irritation, category 2
Skin Irrit. 2 Skin irritation, category 2

STOT SE 3 Specific target organ toxicity - single exposure, category 3

Skin Sens. 1 Skin sensitization, category 1

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

Aquatic Chronic 1 Hazardous to the aquatic environment, chronic toxicity, category 1

Aquatic Chronic 2 Hazardous to the aquatic environment, chronic toxicity, category 2

H226 Flammable liquid and vapour.

H228 Flammable solid.

H360D May damage the unborn child.

H361d Suspected of damaging the unborn child.

H330 Fatal if inhaled.
H301 Toxic if swallowed.
H302 Harmful if swallowed.
H332 Harmful if inhaled.

H372 Causes damage to organs through prolonged or repeated exposure.

H304 May be fatal if swallowed and enters airways.

H318 Causes serious eye damage.
H319 Causes serious eye irritation.

H315 Causes skin irritation.
H335 May cause respiratory irritat

H335 May cause respiratory irritation.H317 May cause an allergic skin reaction.



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H336 May cause drowsiness or dizziness.

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.

**EUH066** Repeated exposure may cause skin dryness or cracking.

**EUH205** Contains epoxy constituents. May produce an allergic reaction.

## LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- ATE: Acute Toxicity Estimate
- CAS: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE: Identifier in ESIS (European archive of existing substances)
- CLP: Regulation (EC) 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: Regulation (EC) 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA: Time-weighted average exposure limit
- TWA STEL: Short-term exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

#### GENERAL BIBLIOGRAPHY

- 1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
- Regulation (EC) 1272/2008 (CLP) of the European Parliament
   Regulation (EU) 2020/878 (II Annex of REACH Regulation)
- 4. Regulation (EC) 790/2009 (I Atp. CLP) of the European Parliament
- 5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament 6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
- 7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
- Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
- 9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
- 10. Regulation (EÚ) 2015/1221 (VII Atp. CLP) of the European Parliament
- 11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament
- 12. Regulation (EU) 2016/1179 (IX Atp. CLP)
- 13. Regulation (EU) 2017/776 (X Atp. CLP) 14. Regulation (EU) 2018/669 (XI Atp. CLP)
- 15. Regulation (EU) 2019/521 (XII Atp. CLP)
- 16. Delegated Regulation (UE) 2018/1480 (XIII Atp. CLP)
- 17. Regulation (EU) 2019/1148
- 18. Delegated Regulation (UE) 2020/217 (XIV Atp. CLP)
- 19. Delegated Regulation (UE) 2020/1182 (XV Atp. CLP)
- 20. Delegated Regulation (UE) 2021/643 (XVI Atp. CLP)
- 21. Delegated Regulation (UE) 2021/849 (XVII Atp. CLP)
- 22. Delegated Regulation (UE) 2022/692 (XVIII Atp. CLP)
- The Merck Index. 10th Edition
- Handling Chemical Safety
- INRS Fiche Toxicologique (toxicological sheet)
- Patty Industrial Hygiene and Toxicology
- N.I. Sax Dangerous properties of Industrial Materials-7, 1989 Edition



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- IFA GESTIS website
- ECHA website
- Database of SDS models for chemicals Ministry of Health and ISS (Istituto Superiore di Sanità) Italy

#### Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.

CALCULATION METHODS FOR CLASSIFICATION

Chemical and physical hazards: Product classification derives from criteria established by the CLP Regulation, Annex I, Part 2. The data for evaluation of chemical-physical properties are reported in section 9.

Health hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 3, unless determined otherwise in Section 11.

Environmental hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 4, unless determined otherwise in Section 12.

Changes to previous review: The following sections were modified: 01 / 02 / 03 / 07 / 08 / 09 / 11 / 14 / 15 / 16.