

PROFESSIONAL DEESEA POLISHING ANTIFOULING WHITE

Safety Data Sheet

According to Annex II to REACH - Regulation 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

PROFESSIONAL DEESEA POLISHING ANTIFOULING WHITE**1.2. Relevant identified uses of the substance or mixture and uses advised against**

Intended use

PEINTURE MARINE**Identified Uses**

Paint product for boating - marine

Industrial

-

Professional

✓

Consumer

-

Uses Advised Against

CONSUMATORE: FAI-DA-TE

1.3. Details of the supplier of the safety data sheetName
Full address
District and Country**UNDERWATER SYSTEMS SAS**
613, Route des Princes d'Orange
84190 Gigondas
France

Tel. +33 (0)4 90 65 01 72

infos@underwatersystems.fr

1.4. Emergency telephone number

For urgent inquiries refer to

National Poisons Information Service – Birmingham (UK)**+44 121 507 4123**Website <http://www.npis.org/>

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.
Reproductive toxicity, category 1B	H360D	May damage the unborn child.
Acute toxicity, category 4	H332	Harmful if inhaled.
Specific target organ toxicity - repeated exposure, category 2	H373	May cause damage to organs through prolonged or repeated exposure.
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, category 1	H400	Very toxic to aquatic life.
Hazardous to the aquatic environment, chronic toxicity, category 1	H410	Very toxic to aquatic life with long lasting effects.

2.2. Label elements

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

PROFESSIONAL DEEPSEA POLISHING ANTIFOULING WHITE

Hazard pictograms:



Signal words:

Danger

Hazard statements:

H226	Flammable liquid and vapour.
H360D	May damage the unborn child.
H332	Harmful if inhaled.
H373	May cause damage to organs through prolonged or repeated exposure.
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.
EUH032	Contact with acids liberates very toxic gas.
EUH066	Repeated exposure may cause skin dryness or cracking.
EUH205	Contains epoxy constituents. May produce an allergic reaction.
EUH211	Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist. Restricted to professional users.

Precautionary statements:

P501	Dispose of contents / container to an approved waste disposal facility in accordance with applicable local/regional/national/international regulations.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260	Do not breathe dust / fume / gas / mist / vapours / spray.
P201	Obtain special instructions before use.
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.
P310	Immediately call a POISON CENTER / doctor / . . .

Contains:	Pyrithione zinc Hydrocarbons, C9, aromatics (CAS number: 64742-95-6) ROSIN
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Product not intended for uses provided for by Directive 2004/42/EC.

2.3. Other hazardsOn the basis of available data, the product does not contain any PBT or vPvB in percentage \geq than 0,1%.The product does not contain substances with endocrine disrupting properties in concentration \geq 0.1%.**SECTION 3. Composition/information on ingredients****3.2. Mixtures**

Contains:

Identification	x = Conc. %	Classification (EC) 1272/2008 (CLP)
Hydrocarbons, C9, aromatics (CAS number: 64742-95-6)		
CAS 128601-23-0	$22 \leq x < 25$	Flam. Liq. 3 H226, Asp. Tox. 1 H304, STOT SE 3 H335, STOT SE 3 H336, Aquatic Chronic 2 H411, EUH066

PROFESSIONAL DEEPSEA POLISHING ANTIFOULING WHITE

EC 918-668-5

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REACH Reg. 01-2119455851-35-XXXX

COPPER THIOCIANATE

CAS 1111-67-7

19

Aquatic Acute 1 H400 M=10, Aquatic Chronic 1 H410 M=10, EUH032

EC 214-183-1

INDEX 029-015-00-0

REACH Reg. 05-2116410430-66-0000

TITANIUM DIOXIDE [in powder form containing 1 % or more of particles with aerodynamic diameter $\leq 10 \mu\text{m}$]

CAS 13463-67-7

 $13 \leq x < 16$

Carc. 2 H351, Classification note according to Annex VI to the CLP Regulation: 10, V, W

EC 236-675-5

INDEX 022-006-00-2

REACH Reg. 01-2119489379-17-xxxx

ROSIN

CAS 8050-09-7

 $13 \leq x < 16$

Skin Sens. 1 H317

EC 232-475-7

INDEX 650-015-00-7

REACH Reg. 01-2119480418-32-XXXX

ZINC OXIDE

CAS 1314-13-2

 $10 \leq x < 13$

Aquatic Acute 1 H400 M=1, Aquatic Chronic 1 H410 M=1

EC 215-222-5

INDEX 030-013-00-7

REACH Reg. 01-2119463881-32-XXXX

Pyrithione zinc

CAS 13463-41-7

4,6

Repr. 1B H360D, Acute Tox. 2 H330, Acute Tox. 3 H301, STOT RE 1 H372, Eye Dam. 1 H318, Aquatic Acute 1 H400 M=1000, Aquatic Chronic 1 H410 M=10

EC 236-671-3

LD50 Oral: 221 mg/l/4h, LC50 Inhalation mists/powders: 0,14 mg/l/4h

INDEX 613-333-00-7

1-methyl-2-methoxy acetate

CAS 108-65-6

 $2 \leq x < 3$

Flam. Liq. 3 H226

EC 203-603-9

INDEX 607-195-00-7

REACH Reg. 01-2119475791-29-XXXX

BISPHENOL A EPOXY RESIN

CAS 25068-38-6

 $0,1 \leq x < 0,4$

Eye Irrit. 2 H319, Skin Irrit. 2 H315, Skin Sens. 1 H317, Aquatic Chronic 2 H411, EUH205

EC 500-033-5

INDEX 603-074-00-8

REACH Reg. 01-2119456619-26
01-2119456619-26**QUARTZ**

CAS 14808-60-7

 $0 \leq x < 0,05$

STOT RE 1 H372

EC 238-878-4

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PROFESSIONAL DEEPSEA POLISHING ANTIFOULING WHITE**METHYL METHACRYLATE**

CAS 80-62-6

 $0 \leq x < 0,05$ Flam. Liq. 2 H225, Skin Irrit. 2 H315, STOT SE 3 H335, Skin Sens. 1 H317,
Classification note according to Annex VI to the CLP Regulation: D

EC 201-297-1

INDEX 607-035-00-6

REACH Reg. 01-2119452498-28-
XXXX

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

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. Get medical advice/attention 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.

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

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

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

Information not available

SECTION 5. Firefighting measuresCOPPER THIOCIANATE
EXTINGUISH WITH WATER.**5.1. Extinguishing media****SUITABLE EXTINGUISHING EQUIPMENT**

Extinguishing substances are: carbon dioxide and 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**

If large quantities of the product are involved in a fire, they can make it considerably worse. Do not breathe combustion products.

METHYL METHACRYLATE

Heat may cause the product to polymerise, which could lead to explosion.

5.3. Advice for firefighters**GENERAL INFORMATION**

In the case of fire, use jets of water to cool the containers to prevent the risk of explosions (product decomposition and excess pressure) and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Remove all containers containing the product from the fire, if it is safe to do so.

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).

PROFESSIONAL DEEPSEA POLISHING ANTIFOULING WHITE**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**

Ensure that there is an adequate earthing system for the equipment and personnel. Avoid contact with eyes and skin. Do not breathe powders, vapours or mists. Do not eat, drink or smoke during use. Wash hands after use. Avoid leakage of the product into the environment.

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. 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.

7.2. Conditions for safe storage, including any incompatibilities

Store only in the original container. Store in a ventilated and dry place, far away from sources of ignition. Keep containers well sealed. Keep the product in clearly labelled containers. Avoid overheating. Avoid violent blows. Keep containers away from any incompatible materials, see section 10 for details.

Store in a cool and well ventilated place, keep far away from sources of heat, naked flames and sparks and other sources of ignition.

Storage class TRGS 510 (Germany):3

7.3. Specific end use(s)

Information not available

SECTION 8. Exposure controls/personal protection**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

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ESP	España	Arbeitsstoffe, Mitteilung 56
FRA	France	Límites de exposición profesional para agentes químicos en España 2021
ITA	Italia	Valeurs limites d'exposition professionnelle aux agents chimiques en France. ED 984 - INRS
NLD	Nederland	Decreto Legislativo 9 Aprile 2008, n.81
PRT	Portugal	Arbeidsomstandighedenregeling. Lijst van wettelijke grenswaarden op grond van de artikelen 4.3, eerste lid, en 4.16, eerste lid, van het Arbeidsomstandighedenbesluit
POL	Polska	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 exposição durante o trabalho a agentes cancerígenos ou mutagénicos
ROU	România	Rozporządzenie ministra rozwoju, pracy i technologii z dnia 18 lutego 2021 r. Zmieniające rozporządzenie w sprawie najwyższych dopuszczalnych stężeń i natężeń czynników szkodliwych dla zdrowia w środowisku pracy
GBR	United Kingdom	Hotărârea nr. 53/2021 pentru modificarea hotărârii guvernului nr. 1.218/2006, precum și pentru modificarea și completarea hotărârii guvernului nr. 1.093/2006
EU	OEL EU	EH40/2005 Workplace exposure limits (Fourth Edition 2020)
	TLV-ACGIH	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.
		ACGIH 2021

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
Normal value of STP microorganisms	NPI
Normal value for the food chain (secondary poisoning)	NPI
Normal value for the terrestrial compartment	NPI
Normal value for the atmosphere	NPI

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers			Chronic systemic	Effects on workers		
	Acute local	Acute systemic	Chronic local		Acute local	Acute systemic	Chronic local
Oral				11 mg/kg bw/d			
Inhalation				32 mg/m3			150 mg/m3
Skin				11 mg/kg bw/d			25 mg/kg bw/d

COPPER THIOCIANATE

Threshold Limit Value

Type	Country	TWA/8h	STEL/15min	Remarks / Observations
		mg/m3	ppm	
OEL	EU	0,2	2	

TITANIUM DIOXIDE [in powder form containing 1 % or more of particles with aerodynamic diameter $\leq 10 \mu\text{m}$]

Threshold Limit Value

Type	Country	TWA/8h	STEL/15min	Remarks / Observations
		mg/m3	ppm	
VLA	ESP	10		
VLEP	FRA	10		
NDS/NDSch	POL	10		INHAL
TLV	ROU	10	15	
WEL	GBR	10		INHAL

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WEL	GBR	4	RESP
TLV-ACGIH		10	

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
Normal value of STP microorganisms	NPI
Normal value for the food chain (secondary poisoning)	NPI
Normal value for the terrestrial compartment	NPI
Normal value for the atmosphere	NPI

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral		NPI		NPI				
Inhalation	NPI	NPI	NPI	NPI	NPI	NPI	NPI	NPI
Skin	NPI	NPI	NPI	NPI	NPI	NPI	NPI	NPI

ROSIN

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
TLV	ROU	0,1				
WEL	GBR	0,05		0,15		

Predicted no-effect concentration - PNEC

Normal value in fresh water	0	mg/l
Normal value in marine water	0	mg/l
Normal value for fresh water sediment	0,02	mg/kg
Normal value for marine water sediment	0	mg/kg
Normal value of STP microorganisms	1000	mg/l
Normal value for the food chain (secondary poisoning)	0	mg/kg

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers			Effects on workers				
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				15 mg/kg				
Inhalation				52 mg/m3				176 mg/m3
Skin				15 mg/kg				25 mg/kg

ZINC OXIDE

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
MAK	DEU	2		4		INHAL
MAK	DEU	0,1		0,4		RESP
VLA	ESP	2		10		
VLEP	FRA	5				

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NDS/NDSch	POL	5	10	INHAL	Na Zn
TLV	ROU	5	10		Fumuri
TLV-ACGIH		2	10	RESP	

Predicted no-effect concentration - PNEC

Normal value in fresh water	20,6	µg/L
Normal value in marine water	6,1	µg/L
Normal value for fresh water sediment	117,8	mg/kg
Normal value for marine water sediment	56,5	mg/kg
Normal value for the terrestrial compartment	35,6	mg/kg
Normal value for the atmosphere	NPI	

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral		NPI		830 µg/kg bw/d				
Inhalation	NPI	NPI	NPI	2,5 mg/m3	NPI	NPI	NPI	5 mg/m3
Skin	NPI	NPI	NPI	83 mg/kg bw/d	NPI	NPI	NPI	83 mg/kg bw/d

Pyrrithione zinc

Threshold Limit Value

Type	Country	TWA/8h	STEL/15min	Remarks / Observations
		mg/m3	ppm	
OEL	EU	2,5		

Predicted no-effect concentration - PNEC

Normal value in fresh water	90	ng/l
Normal value in marine water	90	ng/l
Normal value for fresh water sediment	0,0095	mg/kg/d
Normal value for marine water sediment	0,0095	mg/kg/d
Normal value of STP microorganisms	0,01	mg/l
Normal value for the terrestrial compartment	1,02	mg/kg/d

Health - Derived no-effect level - DNEL / DMEL

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

1-methyl-2-methoxy acetate

Threshold Limit Value

Type	Country	TWA/8h	STEL/15min	Remarks / Observations
		mg/m3	ppm	
AGW	DEU	270	50	
MAK	DEU	270	50	
VLA	ESP	275	50	SKIN
VLEP	FRA	275	50	SKIN
VLEP	ITA	275	50	SKIN
TGG	NLD	550		
VLE	PRT	275	50	SKIN
NDS/NDSch	POL	260	520	SKIN

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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 - PNEC

Normal value in fresh water	0,635	mg/l
Normal value in marine water	0,0635	mg/l
Normal value for fresh water sediment	3,29	mg/kg
Normal value for marine water sediment	0,329	mg/kg
Normal value of STP microorganisms	100	mg/l
Normal value for the food chain (secondary poisoning)	NPI	
Normal value for the terrestrial compartment	0,29	mg/kg
Normal value for the atmosphere	NPI	

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral	500 mg/kg bw/d		36 mg/kg bw/d	1,67 mg/kg				
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

BISPHENOL A EPOXY RESIN

Predicted no-effect concentration - PNEC

Normal value in fresh water	0,006	mg/l
Normal value in marine water	0,0006	mg/l
Normal value for fresh water sediment	0,0627	mg/kg
Normal value for marine water sediment	0,00627	mg/kg
Normal value of STP microorganisms	10	mg/l
Normal value for the terrestrial compartment	0,0478	mg/l

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral		0,75 mg/kg bw/d		0,75 mg/kg bw/d				
Inhalation					0,012 mg/kg			0,012 mg/kg
Skin					8,33 mg/kg			8,33 mg/kg

QUARTZ

Threshold Limit Value

Type	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

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TLV-ACGIH

0,025

RESP

METHYL METHACRYLATE

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m ³	ppm	mg/m ³	ppm	
AGW	DEU	210	50	420 (C)	100 (C)	
MAK	DEU	210	50	420	100	
VLA	ESP		50		100	
VLEP	FRA	205	50	410	100	
VLEP	ITA		50		100	
TGG	NLD	205		410		
VLE	PRT		50		100	
NDS/NDSch	POL	100		300		
TLV	ROU	205	50	410	100	
WEL	GBR	208	50	416	100	
OEL	EU		50		100	
TLV-ACGIH		205	50	410	100	
Predicted no-effect concentration - PNEC						
Normal value in fresh water				940	µg/L	
Normal value in marine water				940	µg/L	
Normal value for fresh water sediment				5,74	mg/kg/d	
Normal value for marine water sediment				NEA		
Normal value for water, intermittent release				940	µg/L	
Normal value of STP microorganisms				10	mg/l	
Normal value for the terrestrial compartment				1,47	mg/kg/d	
Normal value for the atmosphere				NPI		

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers			Effects on workers				
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Inhalation			104 mg/m ³	74,3 mg/m ³			208 mg/m ³	208 mg/m ³
Skin	1,5 mg/kg bw/d		1,5 mg/kg bw/d	8,2 mg/kg bw/d	1,5 mg/kg bw/d		1,5 mg/kg bw/d	13,67 mg/kg bw/d

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.

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.

Provide an emergency shower with face and eye wash station.

If the product may or must come into contact or react with acids, suitable technical and/or organisational measures should be taken to prevent the development of toxic and/or inflammable gases.

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Exposure levels must be kept as low as possible to avoid significant build-up in the organism. Manage personal protective equipment so as to guarantee maximum protection (e.g. reduction in replacement times).

HAND PROTECTION

Protect hands with category III work gloves (see standard EN 374).

The following should be considered when choosing work glove material: 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).

RESPIRATORY PROTECTION

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, use a mask with a type A filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (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 open-circuit 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	white	
Odour	characteristic of solvent	
Melting point / freezing point	Not available	
Initial boiling point	Not available	
Flammability	Not available	
Lower explosive limit	Not available	
Upper explosive limit	Not available	
Flash point	39 °C	Method:Abel-Pensky Closed Cup
Auto-ignition temperature	Not available	
pH	Not available	Reason for missing data:substance/mixture is non-soluble (in water)
Kinematic viscosity	>20,5 mm ² /sec (40°C)	
Dynamic viscosity	2" 30" ± 15"	Method:Coupe Ford Ø 4 Temperature: 20 °C
Solubility	insoluble in water	
Partition coefficient: n-octanol/water	Not available	
Vapour pressure	1,59 mmHg	

PROFESSIONAL DEEPSEA POLISHING ANTIFOULING WHITE

Density and/or relative density	1,45	Method:OECD 109
Relative vapour density	Not available	
Particle characteristics	Not applicable	

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)	70,42 %	Method:Calcolato
VOC (Directive 2010/75/EU)	26,87 % - 390,73 g/litre	
VOC (volatile carbon)	23,23 % - 337,88 g/litre	

SECTION 10. Stability and reactivity**10.1. Reactivity**

1-methyl-2-methoxy acetate

Stable in normal conditions of use and storage.

With air it can slowly give off peroxides that explode due to temperature rise.

10.2. Chemical stability

COPPER THIOCIANATE

Decomposes when heated.

10.3. Possibility of hazardous reactions

Contact with strong acids causes the development of toxic gases.

COPPER THIOCIANATE

Avoid contact with: acids.

Decomposes under the effect of heat.

1-methyl-2-methoxy acetate

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

METHYL METHACRYLATE

May polymerise on contact with: ammonia, organic peroxides, persulphates. Risk of explosion on contact with: dibenzoyl peroxide, diterbutyl peroxide, propionaldehyde. May react dangerously with: strong oxidising agents. Forms explosive mixtures with: air.

10.4. Conditions to avoid

Pyrrithione zinc

Avoid exposure to: direct sunlight extremely high or extremely low temperatures.

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METHYL METHACRYLATE

Avoid exposure to: heat, UV rays. Avoid contact with: oxidising substances, reducing substances, acids, bases.

10.5. Incompatible materials

Pyrrithione zinc

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

1-methyl-2-methoxy acetate

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

10.6. Hazardous decomposition products

COPPER THIOCIANATE

Develops: sulphurous anhydride, carbon monoxide, nitrogen oxide, nitrogen dioxide, hydrogen cyanide.

Pyrrithione zinc

Can develop: carbon dioxide carbon monoxide sulphur compounds nitrogen oxide.

METHYL METHACRYLATE

When heated to decomposition releases: harsh fumes, zinc alloys.

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

1-methyl-2-methoxy acetate

The main route of entry is through the skin, while the respiratory route is less important due to the low vapour pressure of the product..

Information on likely routes of exposure

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

1-methyl-2-methoxy acetate

WORKERS: inhalation; skin contact.

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

1-methyl-2-methoxy acetate

Above 100 ppm there is irritation of the eye, nasal and oropharyngeal mucous membranes. At 1000 ppm there are disturbances in balance and severe eye irritation. Clinical and biological examinations of exposed volunteers revealed no abnormalities. Acetate produces major skin and eye irritation by direct contact. No chronic effects in humans are reported (INCR, 2010).

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Information not available

ACUTE TOXICITY

ATE (Inhalation - mists / powders) of the mixture: 2,8 mg/l
ATE (Oral) of the mixture: >2000 mg/kg
ATE (Dermal) of the mixture: Not classified (no significant component)

COPPER THIOCIANATE

LD50 (Dermal): > 2000 mg/kg RAT
LD50 (Oral): > 5000 mg/kg/bw FEMALE RAT
LC50 (Inhalation mists/powders): > 5,86 mg/l RAT

TITANIUM DIOXIDE [in powder form contain
ing 1 % or more of particles with aerodynamic dia
meter ≤ 10 µm]

LD50 (Oral): > 10000 mg/kg Rat
LC50 (Inhalation vapours): > 343 mg/l/4h 3.43 - 6.82 RAT

ROSIN

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

Pyrrithione zinc

LD50 (Dermal): > 2000 mg/kg Rabbit
LD50 (Oral): 221 mg/kg Rat
LC50 (Inhalation mists/powders): 0,14 mg/l/4h Rat – male or female

1-methyl-2-methoxy acetate

LD50 (Dermal): > 3160 mg/kg Rat
LD50 (Oral): 8500 mg/kg Rat
LC50 (Inhalation vapours): 6193 mg/m³/4h Rat

CHLOROPARAFFINS

LD50 (Dermal): > 4000 mg/kg RAT
LD50 (Oral): > 10000 mg/kg RAT

ZEOLITE

LD50 (Dermal): > 2000 mg/kg Rabbit
LD50 (Oral): > 5000 mg/kg Rat
LC50 (Inhalation mists/powders): > 15 mg/l/1h Rat

BISPHENOL A EPOXY RESIN

PROFESSIONAL DEEPSEA POLISHING ANTIFOULING WHITE

LD50 (Dermal): > 23000 mg/kg RAT
LD50 (Oral): > 15000 mg/kg RAT

QUARTZ

LD50 (Oral): > 500 mg/kg

METHYL METHACRYLATE

LD50 (Dermal): > 5000 mg/kg Rabbit
LD50 (Oral): > 7900 mg/kg 7 900 - 9 400 mg/kg bw RAT
LC50 (Inhalation vapours): > 29,8 mg/l/4h

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

Respiratory sensitization

Information not available

Skin sensitization

Information not available

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

TITANIUM DIOXIDE [in powder form containing 1 % or more of particles with aerodynamic diameter $\leq 10 \mu\text{m}$]

The classification as a carcinogen by inhalation applies only to mixtures in powder form containing 1% or more of titanium dioxide which is in the form of or incorporated in particles with aerodynamic diameter $\leq 10 \mu\text{m}$.

REPRODUCTIVE TOXICITY

May damage the unborn child

Adverse effects on sexual function and fertility

Information not available

PROFESSIONAL DEEPSEA POLISHING ANTIFOULING WHITE

Adverse effects on development of the offspring

Information not available

Effects on or via lactation

Information not available

STOT - SINGLE EXPOSURE

May cause respiratory irritation

May cause drowsiness or dizziness

Target organs

Information not available

Route of exposure

Information not available

STOT - REPEATED EXPOSURE

May cause damage to organs

Target organs

Information not available

Route of exposure

Information not available

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.

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.
BISPHENOL A EPOXY RESIN
AVOID PENETRATION INTO THE SUBSOIL. DO NOT DISCHARGE INTO DRAINS.

12.1. Toxicity

ROSIN

LC50 - for Fish	> 60,3 mg/l/96h
EC50 - for Crustacea	> 911 mg/l/48h
EC50 - for Algae / Aquatic Plants	> 1000 mg/l/72h

PROFESSIONAL DEEPSEA POLISHING ANTIFOULING WHITE

TITANIUM DIOXIDE [in powder form containing 1 % or more of particles with aerodynamic diameter $\leq 10 \mu\text{m}$]

EC50 - for Crustacea > 2,41 mg/l/48h 2.41 - 103.9

EC50 - for Algae / Aquatic Plants > 3,58 mg/l/72h 3.58 - 100

METHYL METHACRYLATE

LC50 - for Fish > 79 mg/l/96h

EC50 - for Crustacea > 69 mg/l/48h

EC50 - for Algae / Aquatic Plants > 110 mg/l/72h

1-methyl-2-methoxy 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 *Oncorhynchus mykiss*

Chronic NOEC for Crustacea > 99 mg/l *Daphnia magna*

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

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

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

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

ZEOLITE

LC50 - for Fish > 680 mg/l/96h fish

EC50 - for Crustacea > 100 mg/l/48h *Daphnia*

EC50 - for Algae / Aquatic Plants > 300 mg/l/72h Algae

COPPER THIOCIANATE

LC50 - for Fish > 0,03 mg/l/96h *trout iridea*

EC50 - for Crustacea > 0,02 mg/l/48h *Daphnia magna*

BISPHENOL A EPOXY RESIN

LC50 - for Fish > 2 mg/l/96h *Oncorhynchus mykiss*

EC50 - for Crustacea > 1,4 mg/l/48h *Daphnia magna*

EC50 - for Algae / Aquatic Plants > 0 mg/l/72h batteri, 18h:> 42,6 mg/l

Chronic NOEC for Crustacea > 0,3 mg/l 21 D

Pyrethrin zinc

LC50 - for Fish > 0,0026 mg/l/96h *Culex quinquefasciatus*

EC50 - for Algae / Aquatic Plants 0,00088 mg/l/72h *Skeletonema costatum*

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EC10 for Algae / Aquatic Plants 0,00068 mg/l/72h Skeletonema costatum

12.2. Persistence and degradability

ROSIN

Solubility in water 0,1 - 100 mg/l

Rapidly degradable

TITANIUM DIOXIDE [in powder form containing 1 % or more of particles with aerodynamic diameter $\leq 10 \mu\text{m}$]

Solubility in water < 0,001 mg/l

Degradability: information not available

METHYL METHACRYLATE

Solubility in water 15300 mg/l

Rapidly degradable

1-methyl-2-methoxy acetate

Solubility in water > 10000 mg/l

Rapidly degradable

ZINC OXIDE

Solubility in water > 1,2 mg/l 1.2 - 2.9 mg/L @ 20 °C

NOT rapidly degradable

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

Solubility in water > 93 mg/l

Rapidly degradable

Pyrithione zinc

Rapidly degradable

12.3. Bioaccumulative potential

ROSIN

Partition coefficient: n-octanol/water 3

BCF 56,23

METHYL METHACRYLATE

Partition coefficient: n-octanol/water 1,38

1-methyl-2-methoxy acetate

Partition coefficient: n-octanol/water 1,2

ZINC OXIDE

Partition coefficient: n-octanol/water < 4

BCF > 175

Pyrithione zinc

Partition coefficient: n-octanol/water < 4

PROFESSIONAL DEEPSEA POLISHING ANTIFOULING WHITE**12.4. Mobility in soil**

ROSIN

Partition coefficient: soil/water 3,7289

METHYL METHACRYLATE

Partition coefficient: soil/water 0,94

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 \geq 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**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, 1263
IATA:

14.2. UN proper shipping name

ADR / RID: PAINT or PAINT RELATED MATERIAL

IMDG: PAINT or PAINT RELATED MATERIAL (Hydrocarbons, C9, aromatics (CAS number: 64742-95-6))

IATA: PAINT or 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



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14.4. Packing group

ADR / RID, IMDG, III
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 Quantities: 5 L	Tunnel restriction code: (D/E)
	Special provision: 163, 367, 650		
IMDG:	EMS: F-E, <u>S-E</u>	Limited Quantities: 5 L	
IATA:	Cargo:	Maximum quantity: 220 L	Packaging instructions: 366
	Pass.:	Maximum quantity: 60 L	Packaging instructions: 355
	Special provision:	A3, A72, A192	

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

Product
Point 3 - 40

Contained substance

Point 75

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

Not applicable

PROFESSIONAL DEEPSEA POLISHING ANTIFOULING WHITESubstances in Candidate List (Art. 59 REACH)

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

Substances subject to authorisation (Annex XIV REACH)

None

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

None

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.

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

1-methyl-2-methoxy acetate

SECTION 16. Other information

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

Flam. Liq. 2	Flammable liquid, category 2
Flam. Liq. 3	Flammable liquid, category 3
Carc. 2	Carcinogenicity, category 2
Repr. 1B	Reproductive toxicity, category 1B
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
STOT RE 2	Specific target organ toxicity - repeated exposure, category 2
Eye Dam. 1	Serious eye damage, category 1
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

PROFESSIONAL DEEPSEA POLISHING ANTIFOULING WHITE

Aquatic Chronic 1	Hazardous to the aquatic environment, chronic toxicity, category 1
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H351	Suspected of causing cancer.
H360D	May damage the unborn child.
H330	Fatal if inhaled.
H301	Toxic 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.
H373	May cause damage to organs through prolonged or repeated exposure.
H318	Causes serious eye damage.
H315	Causes skin irritation.
H335	May cause respiratory irritation.
H317	May cause an allergic skin reaction.
H336	May cause drowsiness or dizziness.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
EUH032	Contact with acids liberates very toxic gas.
EUH066	Repeated exposure may cause skin dryness or cracking.
EUH205	Contains epoxy constituents. May produce an allergic reaction.
EUH211	Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

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

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PROFESSIONAL DEEPSEA POLISHING ANTIFOULING WHITE

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 4. Regulation (EC) 790/2009 (I Atp. CLP) of the European Parliament
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 - Handling Chemical Safety
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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.