PROFESSIONAL RACING LONG LIFE BLACK

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 **ANTIFOULING PROFESSIONAL RACING LONG LIFE - BLACK**

UFI : **6GQ2-Y0NV-C004-JK08**

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

Intended use **MARINE PAINTINGS**

Identified Uses	Industrial	Professional	Consumer
Paint product for boating - marine	✔	✔	-

Uses Advised Against

CONSUMER: DO-IT-YOURSELF

1.3. Details of the supplier of the safety data sheet

Name

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

Ireland : National Poisons Information Centre / Tel. : (01) 809 2166 **(8 am to 10 pm)**
https://www.poisons.ie/

England: NHS 111 : 111
Scotland : NHS 24 : 111
Wales : NHS Direct : 111 **or 0845 4647**

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.
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.
Skin irritation, category 2	H315	Causes skin irritation.
Specific target organ toxicity - single exposure, category 3	H335	May cause respiratory irritation.
Skin sensitization, category 1	H317	May cause an allergic skin reaction.
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.

Hazard pictograms:

Signal words: Danger

Hazard statements:

H226	Flammable liquid and vapour.
H302+H332	Harmful if swallowed or if inhaled.
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.
H410	Very toxic to aquatic life with long lasting effects.
EUH205	Contains epoxy constituents. May produce an allergic reaction.

Precautionary statements:

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.
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 / . . .
P370+P378	In case of fire, use foam, powder, CO2 extinguishing media. Water spray to cool containers. "Do not use water."

Contains: XYLENE
DICOPPER OXIDE
COLOPHONY
Copper Pyrithione

The product is classified both in acute and long-term aquatic hazard categories: it is possible to use only hazard statement H410 on the label.

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

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

Contains:

Identification	x = Conc. %	Classification (EC) 1272/2008 (CLP)
DICOPPER OXIDE		
INDEX 029-002-00-X EC 215-270-7 CAS 1317-39-1 REACH Reg. 01-2119513794-36-XXXX	30 ≤ x < 35	Acute Tox. 4 H302, Acute Tox. 4 H332, Eye Dam. 1 H318, Aquatic Acute 1 H400 M=100, Aquatic Chronic 1 H410 M=10 ATE Oral: 500 mg/kg, LC50 Inhalation mists/powders: 3,34 mg/l/4h
COLOPHONY		
INDEX 650-015-00-7 EC 232-475-7 CAS 8050-09-7 REACH Reg. 01-2119480418-32-XXXX	13 ≤ x < 16	Skin Sens. 1 H317
Hydrocarbons, C9, aromatics (CAS number: 64742-95-6)		
INDEX - EC 918-668-5 CAS 128601-23-0 REACH Reg. 01-2119455851-35-XXXX	10 ≤ x < 13	Flam. Liq. 3 H226, Asp. Tox. 1 H304, STOT SE 3 H335, STOT SE 3 H336, Aquatic Chronic 2 H411, EUH066
XYLENE		
INDEX 601-022-00-9 EC 215-535-7 CAS 1330-20-7 REACH Reg. 01-2119488216-32-XXXX	10 ≤ x < 13	Flam. Liq. 3 H226, Acute Tox. 4 H312, Acute Tox. 4 H332, Asp. Tox. 1 H304, STOT RE 2 H373, Eye Irrit. 2 H319, Skin Irrit. 2 H315, STOT SE 3 H335, Aquatic Chronic 3 H412, Classification note according to Annex VI to the CLP Regulation: C ATE Dermal: 1100 mg/kg, ATE Inhalation vapours: 11 mg/l
ZINC OXIDE		
INDEX 030-013-00-7 EC 215-222-5 CAS 1314-13-2 REACH Reg. 01-2119463881-32-XXXX	9 ≤ x < 10	Aquatic Acute 1 H400 M=1, Aquatic Chronic 1 H410 M=1
CARBON BLACK		
INDEX - EC 215-609-9 CAS 1333-86-4	2 ≤ x < 3	Substance with a community workplace exposure limit.

REACH Reg. 01-2119384822-32-XXXX		
REACTION MASS OF ETHYLBENZENE AND XYLENE		
INDEX -	2 ≤ x < 3	Flam. Liq. 3 H226, Acute Tox. 4 H312, Acute Tox. 4 H332, Asp. Tox. 1 H304, STOT RE 2 H373, Eye Irrit. 2 H319, Skin Irrit. 2 H315, STOT SE 3 H335, Aquatic Chronic 3 H412, Classification note according to Annex VI to the CLP Regulation: C
EC 905-588-0		ATE Dermal: 1100 mg/kg, ATE Inhalation vapours: 11 mg/l
CAS -		
REACH Reg. 01-2119539452-40XXXX		
Copper Pyrithione		
INDEX -	1,4 ≤ x < 2,4	Acute Tox. 2 H330, Acute Tox. 4 H302, Eye Dam. 1 H318, Aquatic Acute 1 H400 M=100, Aquatic Chronic 1 H410 M=100
EC 238-984-0		ATE Oral: 500 mg/kg, LC50 Inhalation mists/powders: 0,07 mg/l/4h
CAS 14915-37-8		
2-METHOXY-1-METHYLETHYL ACETATE		
INDEX 607-195-00-7	1 ≤ x < 2	Flam. Liq. 3 H226, STOT SE 3 H336
EC 203-603-9		
CAS 108-65-6		
REACH Reg. 01-2119475791-29-XXXX		
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane		
INDEX 603-073-00-2	0,2 ≤ x < 0,3	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		
Pyrithione zinc		
INDEX 613-333-00-7	0,25 ≤ x < 0,3	Repr. 1B H360D, Acute Tox. 2 H330, Acute Tox. 3 H301, STOT RE 1 H372, Eye Dam. 1 H318, Aquatic Chronic 1 H410 M=10
EC 236-671-3		ATE Oral: 100 mg/kg, LC50 Inhalation mists/powders: 0,14 mg/l/4h
CAS 13463-41-7		
METHYL METHACRYLATE		
INDEX 607-035-00-6	0,0099 ≤ x < 0,0158	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		
CAS 80-62-6		
REACH Reg. 01-2119452498-28-XXXX		

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

XYLENE (MIXTURE OF ISOMERS)
*UVCB substance, for which the following product identifiers are also valid:
Reaction mass of ethylbenzene and xylene; CE N. : 905-588-0; Nr. REACH: 01-2119486136-34/ Nr. REACH: 01-2119488216-32;
Reaction mass of ethylbenzene and M-xylene and P-xylene; CE N: 905-562-9; Nr. REACH: 01-2119488216-32/ Nr REACH: 01-2119555267-33.

Supplementary information for nanoforms

CARBON BLACK
Denomination

Other identifier

Shape

Shape 1:

SECTION 4. First aid measures

4.1. Description of first aid measures

In case of doubt or in the presence of symptoms contact a doctor and show him this document.
In case of more severe symptoms, ask for immediate medical aid.
EYES: Remove, if present, contact lenses if the situation allows you to do so easily. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. Get medical advice/attention.
SKIN: Take off immediately all contaminated clothing. Wash immediately and thoroughly with running water (and soap if possible). Get medical advice/attention. Avoid further contact with contaminated clothing.
INGESTION: Do not induce vomiting unless explicitly authorised by a doctor. Do not give anything by mouth to an unconscious person. Get medical advice/attention.
INHALATION: Remove victim to fresh air, away from the accident scene. In the event of respiratory symptoms (coughing, wheezing, breathing difficulty, asthma) keep the victim in a comfortable position for breathing. If necessary administer oxygen. If the subject stops breathing, administer artificial respiration. Get medical advice/attention.
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.

Rescuer protection

It is good practice for rescuers lending support to a person who has been exposed to a chemical substance or to a mixture to wear personal protective equipment. The nature of such protection depends on the hazard level of the substance or mixture, on the type of exposure and on the extent of the contamination. In the absence of other more specific indications, use of disposable gloves in the event of possible contact with body fluids is recommended. For the type of PPE suitable for the characteristics of the substance or mixture, see section 8.

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

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

DELAYED EFFECTS: Based on the information currently available, there are no known cases of delayed effects following exposure to this product.

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

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

Immediately call a POISON CENTER / doctor / . . .
Pyrithione zinc
Treat symptomatically.

Means to have available in the workplace for specific and immediate treatment

Running water for skin and eye wash.

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.

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

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.

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. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat. Avoid leakage of the product into the environment.

7.2. Conditions for safe storage, including any incompatibilities

Store only in the original container. 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

8.1. Control parameters

Regulatory references:

DEU	Deutschland	Forschungsgemeinschaft MAK- und BAT-Werte-Liste 2022 Ständige Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe Mitteilung 58
ESP	España	Límites de exposición profesional para agentes químicos en España 2023
FRA	France	Valeurs limites d'exposition professionnelle aux agents chimiques en FranceDécret n° 2021-1849 du 28 décembre 2021
ITA	Italia	Decreto Legislativo 9 Aprile 2008, n.81
NLD	Nederland	Arbeidsomstandighedenregeling. Lijst van wettelijke grenswaarden op grond van de artikelen 4.3, eerste lid, en 4.16, eerste lid, van het Arbeidsomstandighedenbesluit
PRT	Portugal	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
POL	Polska	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
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
GBR	United Kingdom	EH40/2005 Workplace exposure limits (Fourth Edition 2020)
EU	TLV-ACGIH RCP TLV	ACGIH 2023

ACGIH TLVs and BEIs –
Appendix H

DICOPPER OXIDE

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations	
		mg/m3	ppm	mg/m3	ppm		
MAK	DEU	0,01		0,02			
MAK	DEU	0,01		0,02		RESP	Als Cu
VLA	ESP	0,01				RESP	Como Cu
NDS/NDSCh	POL	0,2					Na Cu
WEL	GBR	1		2			As Cu

Predicted no-effect concentration - PNEC		
Normal value in fresh water	7,8	µl/g
Normal value in marine water	5,2	µl/g
Normal value for fresh water sediment	87	mg/kg
Normal value for marine water sediment	676	mg/kg
Normal value of STP microorganisms	0,23	mg/l

Normal value for the terrestrial compartment	65	mg/kg

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral		82 µg/kg bw/day		41 µg/kg bw/day				
Inhalation	NPI	NPI	NPI	NPI	NPI	NPI	1 mg/m3	1 mg/m3
Skin	NPI	NPI	NPI	NPI	NPI	NPI	NPI	137 mg/kg bw/d

COLOPHONY

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		
TLV-ACGIH		0,001				

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

	Effects on consumers				Effects on workers			
Route of exposure	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

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

	Effects on consumers				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

XYLENE

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	220	50	440	100	SKIN
MAK	DEU	220	50	440	100	SKIN
VLA	ESP	221	50	442	100	SKIN
VLEP	FRA	221	50	442	100	SKIN
VLEP	ITA	221	50	442	100	SKIN
TGG	NLD	210		442		SKIN
VLE	PRT	221	50	442	100	SKIN
NDS/NDSCh	POL	100		200		SKIN
TLV	ROU	221	50	442	100	SKIN
WEL	GBR	220	50	441	100	SKIN
OEL	EU	221	50	442	100	SKIN
TLV-ACGIH			20			

Predicted no-effect concentration - PNEC		
Normal value in fresh water	0,044	mg/l
Normal value in marine water	0,004	mg/l
Normal value for fresh water sediment	2,52	mg/kg
Normal value for marine water sediment	0,252	mg/kg
Normal value of STP microorganisms	1,6	mg/l
Normal value for the terrestrial compartment	0,852	mg/kg

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				12,5 mg/kg/d				
Inhalation	260 mg/m3	260 mg/m3	65.3 mg/m3	65,3 mg/m3	442 mg/m3	442 mg/m3	221 mg/m3	221 mg/m3
Skin				125 mg/kg/d				212 mg/kg/d

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					
VLEP	FRA	10				RESP	
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	14,4	µg/L
Normal value in marine water	7,2	µg/L

Normal value for fresh water sediment	146,9	mg/kg/d
Normal value for marine water sediment	162,2	mg/kg/d
Normal value of STP microorganisms	100	µg/L
Normal value for the terrestrial compartment	831	mg/kg/d
Normal value for the atmosphere	NPI	

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				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				
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

CARBON BLACK

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
OEL	EU	3				RESP

Predicted no-effect concentration - PNEC

Normal value in fresh water	1	mg/l
Normal value in marine water	100	µg/L
Normal value for fresh water sediment	NPI	
Normal value for marine water sediment	NPI	
Normal value for water, intermittent release	1	mg/l
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

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral		NPI		NPI				
Inhalation	NPI	NPI	NPI	60 µg/m³	NPI	NPI	500 µg/m³	1 mg/m3
Skin	NPI	NPI	NPI	NPI	NPI	NPI	NPI	NPI

REACTION MASS OF ETHYLBENZENE AND XYLENE

Predicted no-effect concentration - PNEC

Normal value in fresh water	327	µg/L
Normal value in marine water	327	µg/L
Normal value for fresh water sediment	12,46	mg/kg/d
Normal value for marine water sediment	12,46	mg/kg/d
Normal value of STP microorganisms	6,58	mg/l
Normal value for the terrestrial compartment	2,31	mg/kg/d

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				12,5 mg/kg bw/d				
Inhalation	260 mg/m3	260 mg/m3	65,3 mg/m3	65,3 mg/m3	442 mg/m3	442 mg/m3	221 mg/m3	221 mg/m3
Skin				125 mg/kg bw/d				212 mg/kg bw/d

Copper Pyrithione

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
RCP TLV		0,35		1		

2-METHOXY-1-METHYLETHYL ACETATE

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	270	50	270	50	
MAK	DEU	270	50	270	50	
VLA	ESP	275	50	550	100	SKIN
VLEP	FRA	275	50	550	100	SKIN
VLEP	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 - 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

	Effects on consumers				Effects on workers			
Route of exposure	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

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

Predicted no-effect concentration - PNEC		
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-effect level - DNEL / DMEL

	Effects on consumers				Effects on 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

Pyrithione zinc

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	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

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

METHYL METHACRYLATE

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	210	50	420	100	
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

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Inhalation			104 mg/m3	74,3 mg/m3			208 mg/m3	208 mg/m3
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 ; 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.

Provide an emergency shower with face and eye wash station.

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.
The following should be considered when choosing work glove material (see standard EN 374): compatibility, degradation, permeability time.
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 ISO 16321).

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
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. Use a mask with a type AX filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387).
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	black	
Odour	TYPICAL AROMATIC HYDROCARBONS	
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	23 < T ≤ 60 °C	
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)	Method:v cinematica = v g/mm·s a 40°C / g/mm3
Dynamic viscosity	2'15" ± 15"	Method:Coupe Ford Ø 4 Temperature: 20 °C
Solubility	insoluble in water	
Partition coefficient: n-octanol/water	not available	
Vapour pressure	6,65 mmHg	
Density and/or relative density	1.650 ± 30 g/L kg/l	Method:OECD 109 Temperature: 20 °C
Relative vapour density	not available	
Particle characteristics	not applicable	
Denomination		
Other identifier		

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)	73,50 %			Method:Valore calcolato
VOC (Directive 2010/75/EU)	26,49 %	-	437,02	g/litre
VOC (volatile carbon)	23,26 %	-	383,86	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.

2-METHOXY-1-METHYLETHYL ACETATE

Stable in normal conditions of use and storage.

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

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.

XYLENE

Stable in normal conditions of use and storage.Reacts violently with: strong oxidants,strong acids,nitric acid,perchlorates.May form explosive mixtures with: air.

2-METHOXY-1-METHYLETHYL ACETATE

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

METHYL METHACRYLATE

May polymerize 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

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

Pyrithione zinc

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

METHYL METHACRYLATE

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

10.5. Incompatible materials

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.

Pyrithione zinc

It can develop: carbon dioxide carbon monoxide sulphur compounds

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

2-METHOXY-1-METHYLETHYL ACETATE
The main route of entry is through the skin, while the respiratory route is less important due to the low vapor pressure of the product.

Information on likely routes of exposure

XYLENE
WORKERS: inhalation; contact with the skin.
POPULATION: ingestion of contaminated food or water; inhalation of ambient air.

2-METHOXY-1-METHYLETHYL ACETATE
WORKERS: inhalation; skin contact.

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

XYLENE
Toxic effect on the central nervous system (encephalopathy); irritating for the skin, conjunctiva, cornea and respiratory apparatus.

2-METHOXY-1-METHYLETHYL ACETATE
Above 100 ppm irritation of the eye, nasal and oropharyngeal mucous membranes occurs. At 1000 ppm there are disturbances in balance and severe eye irritation. Clinical and biological examinations performed on exposed volunteers revealed no abnormalities. Acetate produces greater skin and eye irritation by direct contact. No chronic effects on humans are reported (INCR, 2010).

Interactive effects

XYLENE
Intake of alcohol interferes with the metabolism of the substance, inhibiting it. Ethanol consumption (0.8 g/kg) before a 4-hour exposure to xylene vapours (145 and 280 ppm) causes a 50% reduction in the excretion of methyl hippuric acid, whereas the concentration of xylenes in the blood increases approx. 1.5-2 times. At the same time there is an increase in the secondary side effects of the ethanol. The metabolism of the xylenes is increased by phenobarbital and 3-methyl-colantrene type enzyme inducers. Aspirin and xylenes mutually inhibit their conjugation with the glycine, which results in a decrease in urinary excretion of methyl hippuric acid. Other industrial products can interfere with the metabolism of xylenes.

ACUTE TOXICITY

ATE (Inhalation - mists / powders) of the mixture:	2,13 mg/l
ATE (Inhalation - vapours) of the mixture:	Acute Tox. 4
ATE (Inhalation - gas) of the mixture:	Acute Tox. 4
ATE (Oral) of the mixture:	1358,88 mg/kg
ATE (Dermal) of the mixture:	>2000 mg/kg

DICOPPER OXIDE

LD50 (Dermal):	> 2000 mg/kg
LD50 (Oral):	500 mg/kg
ATE (Oral):	500 mg/kg estimate from table 3.1.2 of Annex I of the CLP (figure used for calculation of the acute toxicity estimate of the mixture)
LC50 (Inhalation mists/powders):	3,34 mg/l/4h

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

Hydrocarbons, C9, aromatics (CAS number: 64742-95-6)
LD50 (Dermal): > 3160 mg/kg Rabbit, male/female, OECD 402
LD50 (Oral): 3492 mg/kg RAT, male/female, OECD 401
LC50 (Inhalation vapours): > 6,193 mg/l/4h RAT, male/female, OECD 403

XYLENE
LD50 (Dermal): > 5000 ml/kg Rabbit
ATE (Dermal): 1100 mg/kg estimate from table 3.1.2 of Annex I of the CLP (figure used for calculation of the acute toxicity estimate of the mixture)
LD50 (Oral): > 3523 mg/kg Rat
LC50 (Inhalation vapours): 6700 ppm/4h Rat
ATE (Inhalation vapours): 11 mg/l estimate from table 3.1.2 of Annex I of the CLP (figure used for calculation of the acute toxicity estimate of the mixture)

ZINC OXIDE
LD50 (Dermal): > 2000 mg/kg RAT
LD50 (Oral): > 5000 mg/kg RAT
LC50 (Inhalation vapours): > 5,7 ppm/4h RAT

CARBON BLACK
LD50 (Oral): > 8000 mg/kg RAT

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

REACTION MASS OF ETHYLBENZENE AND XYLENE
LD50 (Dermal): > 12126 mg/kg Rabbit
ATE (Dermal): 1100 mg/kg estimate from table 3.1.2 of Annex I of the CLP (figure used for calculation of the acute toxicity estimate of the mixture)
LD50 (Oral): > 3500 mg/kg RAT
LC50 (Inhalation vapours): 6350 mg/l/4h RAT
ATE (Inhalation vapours): 11 mg/l estimate from table 3.1.2 of Annex I of the CLP (figure used for calculation of the acute toxicity estimate of the mixture)

Copper Pyrithione
LD50 (Dermal): > 2000 mg/kg Rabbit
LD50 (Oral): 1075 mg/kg Rat
ATE (Oral): 500 mg/kg estimate from table 3.1.2 of Annex I of the CLP (figure used for calculation of the acute toxicity estimate of the mixture)
LC50 (Inhalation mists/powders): 0,07 mg/l/4h Rat

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

2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane
LD50 (Dermal): > 23000 mg/kg RABBIT
LD50 (Oral): > 15000 mg/kg RAT

Pyrithione zinc
LD50 (Dermal): > 2000 mg/kg Rabbit
LD50 (Oral): 221 mg/kg Rat

ATE (Oral):	100 mg/kg estimate from table 3.1.2 of Annex I of the CLP (figure used for calculation of the acute toxicity estimate of the mixture)
LC50 (Inhalation mists/powders):	0,14 mg/l/4h Rat - male and female

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

Causes skin irritation

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

XYLENE
Classified in Group 3 (not classifiable as a human carcinogen) by the International Agency for Research on Cancer (IARC).
The US Environmental Protection Agency (EPA) affirms that "the data is inadequate for an assessment of the carcinogenic potential".

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

STOT - SINGLE EXPOSURE

May cause respiratory irritation

STOT - REPEATED EXPOSURE

May cause damage to organs

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 has negative effects on the aquatic environment.

12.1. Toxicity

XYLENE	
LC50 - for Fish	2,6 mg/l/96h Oncorhynchus mykiss
Chronic NOEC for Fish	> 1,3 mg/l Oncorhynchus mykiss 56gg
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
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
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
REACTION MASS OF ETHYLBENZENE AND XYLENE	
LC50 - for Fish	> 2,6 mg/l/96h 2.6 - 8.4
EC50 - for Algae / Aquatic Plants	> 4,6 mg/l/72h 4.6 - 4.9

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

EC50 - for Algae / Aquatic Plants	> 290 µg/l/72h 290 - 420 µg/L

Copper Pyrithione

LC50 - for Fish	0,0032 mg/l/96h Oncorhynchus Mykiss
EC50 - for Crustacea	0,022 mg/l/48h Daphnia Magna
Chronic NOEC for Algae / Aquatic Plants	0,00046 mg/l 120h Skeletonema costatum

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

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

LC50 - for Fish	> 2 mg/l/96h PESCI
EC50 - 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

CARBON BLACK

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

XYLENE

Solubility in water	100 - 1000 mg/l

Rapidly degradable

COLOPHONY

Solubility in water	0,1 - 100 mg/l

Rapidly degradable

METHYL METHACRYLATE

Solubility in water	15300 mg/l

Rapidly degradable

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 mg/l 1.2 - 2.9 mg/L @ 20 °C

NOT rapidly degradable

REACTION MASS OF ETHYLBENZENE AND XYLENE

Solubility in water > 165,8 mg/l

Rapidly degradable

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

Solubility in water > 93 mg/l

Rapidly degradable

Copper Pyrithione

Entirely degradable
Intrinsically biodegradable

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

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

NOT rapidly degradable

CARBON BLACK

Solubility in water > 1 mg/l

Pyrithione zinc

Rapidly degradable

12.3. Bioaccumulative potential

XYLENE

Partition coefficient: n-octanol/water 3,12

BCF 25,9

COLOPHONY

Partition coefficient: n-octanol/water 3

BCF 56,23

METHYL METHACRYLATE

Partition coefficient: n-octanol/water 1,38

2-METHOXY-1-METHYLETHYL ACETATE

Partition coefficient: n-octanol/water 1,2

ZINC OXIDE

Partition coefficient: n-octanol/water < 4

BCF > 175

REACTION MASS OF ETHYLBENZENE AND XYLENE

Partition coefficient: n-octanol/water > 3,16 Log Kow

Copper Pyrithione

BCF 50

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

Information not available

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

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: UN 1992

14.2. UN proper shipping name

ADR / RID:	FLAMMABLE LIQUID, TOXIC, N.O.S. (Hydrocarbons, C9, aromatics (CAS number: 64742-95-6); Copper Pyrithione)
IMDG:	FLAMMABLE LIQUID, TOXIC, N.O.S. (Hydrocarbons, C9, aromatics (CAS number: 64742-95-6); Copper Pyrithione; DICOPPER OXIDE)
IATA:	FLAMMABLE LIQUID, TOXIC, N.O.S. (Hydrocarbons, C9, aromatics (CAS number: 64742-95-6); Copper Pyrithione)

14.3. Transport hazard class(es)

ADR / RID: Class: 3 Label: 3 (6.1)

IMDG:	Class: 3	Label: 3 (6.1)
IATA:	Class: 3	Label: 3 (6.1)

14.4. Packing group

ADR / RID, IMDG, IATA: III

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: 36	Limited Quantities: 5 lt	Tunnel restriction code: (D/E)
	Special provision: 274		
IMDG:	EMS: F-E, S-D	Limited Quantities: 5 lt	
IATA:	Cargo:	Maximum quantity: 220 L	Packaging instructions: 366
	Passengers:	Maximum quantity: 60 L	Packaging instructions: 355
	Special provision:	A3	

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

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:

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

DICOPPER OXIDE

XYLENE

2-METHOXY-1-METHYLETHYL 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
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
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
Aquatic Chronic 3	Hazardous to the aquatic environment, chronic toxicity, category 3
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H360D	May damage the unborn child.
H330	Fatal if inhaled.
H301	Toxic if swallowed.
H302+H332	Harmful if swallowed or if inhaled.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
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.
H319	Causes serious eye irritation.
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.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful 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
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PMT: Persistent, mobile and toxic
- 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
- vPvM: Very persistent and very mobile
- WGK: Water hazard classes (German).

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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.