

## Safety Data Sheet

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

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

#### 1.1. Product identifier

Product name **RE-23**

UFI : **E200-U0CW-600H-QND3**

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

Intended use **Wall treatment**

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

Name **ITALMONT S.R.L.**

Full address **VIA IV NOVEMBRE 13**

District and Country **63078 Spinetoli (AP) ITALIA**

Tel. **+39 0736 899238**

Fax **+39 0736 899489**

e-mail address of the competent person responsible for the Safety Data Sheet **info@italmont.it**

Supplier: **ITALMONT S.R.L.**

#### 1.4. Emergency telephone number

For urgent inquiries refer to **UE general number - 112 (Available 24h. Safety Data Sheets or Product information could not available for emergency service)**

### 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:

Skin sensitization, category 1A	H317	May cause an allergic skin reaction.
Hazardous to the aquatic environment, chronic toxicity, category 2	H411	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: **Warning**

Hazard statements:

<b>H317</b>	May cause an allergic skin reaction.
<b>H411</b>	Toxic to aquatic life with long lasting effects.

## SECTION 2. Hazards identification ... / &gt;&gt;

EUH071

Corrosive to the respiratory tract.

Precautionary statements:

P280

Wear protective gloves.

P273

Avoid release to the environment.

P391

Collect spillage.

P501

Dispose of the product / container in accordance with local and national provisions

P102

Keep out of reach of children.

P101

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

Contains:

2-OCTYL-2H-ISOTHIAZOL-3-ONE

## 2.3. Other hazards

On 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	Conc. %	Classification (EC) 1272/2008 (CLP)
<b>DIETHYLENE GLYCOL</b>		
INDEX 603-140-00-6	1.6	Acute Tox. 4 H302
EC 203-872-2		ATE Oral: 500 mg/kg
CAS 111-46-6		
<b>Quaternary ammonium compounds, benzyl-C12-14-alkyldimethyl, chlorides</b>		
INDEX 0.48		Acute Tox. 4 H302, Skin Corr. 1B H314, Eye Dam. 1 H318, Aquatic Acute 1 H400 M=10, Aquatic Chronic 1 H410 M=1
EC 287-089-1		LD50 Oral: 795 mg/kg
CAS 85409-22-9		
<b>2-OCTYL-2H-ISOTHIAZOL-3-ONE</b>		
INDEX 613-112-00-5	0.16	Acute Tox. 2 H330, Acute Tox. 3 H301, Acute Tox. 3 H311, Skin Corr. 1 H314, Eye Dam. 1 H318, Skin Sens. 1A H317, Aquatic Acute 1 H400 M=100, Aquatic Chronic 1 H410 M=100, EUH071
EC 247-761-7		Skin Sens. 1A H317: $\geq$ 0.0015%
CAS 26530-20-1		LD50 Oral: 125 mg/kg, LD50 Dermal: 311 mg/kg, LC50 Inhalation mists/powders: 0.27 mg/l/4h
REACH Reg. Biocida		

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

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. Get medical advice/attention.

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

**SECTION 4. First aid measures** ... / >>

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.

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

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

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**

The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.

**UNSUITABLE EXTINGUISHING EQUIPMENT**

None in particular.

**5.2. Special hazards arising from the substance or mixture****HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE**

Do not breathe combustion products.

**5.3. Advice for firefighters****GENERAL INFORMATION**

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

**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.

**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**

Before handling the product, consult all the other sections of this material safety data sheet. Avoid leakage of the product into the environment. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat.

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

Store only in the original container. Store the containers sealed, in a well ventilated place, away from direct sunlight. Keep containers away from any incompatible materials, see section 10 for details.

**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
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)

**DIETHYLENE GLYCOL****Threshold Limit Value**

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	44	10	176	40	11
MAK	DEU	44	10	176	40	
NDS/NDSch	POL	10				INHAL
TLV	ROU	500	115	800	184	
WEL	GBR	101	23			

**2-OCTYL-2H-ISOTHIAZOL-3-ONE****Threshold Limit Value**

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	0.05		0.1		INHAL
AGW	DEU	0.05		0.1		SKIN
MAK	DEU	0.05		0.1		INHAL
MAK	DEU	0.05		0.1		SKIN

**SECTION 8. Exposure controls/personal protection ... / >>****Quaternary ammonium compounds, benzyl-C12-14-alkyldimethyl, chlorides****Predicted no-effect concentration - PNEC**

Normal value in fresh water	0.0009	mg/l
Normal value in marine water	0.00096	mg/l
Normal value for fresh water sediment	12.27	mg/kg
Normal value for marine water sediment	13.09	mg/kg
Normal value for water, intermittent release	0.00016	mg/l
Normal value of STP microorganisms	0.4	mg/l
Normal value for the terrestrial compartment	7	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								3,4 mg/kg bw/d
Inhalation				1,64 mg/m3				3,96 mg/m3
Skin				3,4 mg/kg bw/d				5,7 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.

**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.

**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.

Protect your hands with gloves of the following type:

Material: Nitrile rubber (NBR)

The following should be considered when choosing work glove material: compatibility, degradation, permeability time.

Thickness: 3 mm

Glove thickness must be selected based on the minimum required breakthrough time.

Breakthrough time: 30 min

Glove resistance depends on various elements, such as temperature and other environmental factors.

**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.

**EYE PROTECTION**

Wear airtight protective goggles (see standard EN ISO 16321).

**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 A 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	colourless	
Odour	mild	
Melting point / freezing point	not available	
Initial boiling point	> 100 °C	Substance:WATER Initial boiling point: 100 °C
Flammability	not flammable	
Lower explosive limit	not available	
Upper explosive limit	not available	
Flash point	> 60 °C	
Auto-ignition temperature	not available	
Decomposition temperature	not available	
pH	8	Method:ph meter
Kinematic viscosity	1,004 mm2/s	
Solubility	not available	
Partition coefficient: n-octanol/water	not available	
Vapour pressure	not available	
Density and/or relative density	1	Method:pycnometer
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**

Information not available

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

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

**10.2. Chemical stability**

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

**10.3. Possibility of hazardous reactions**

No hazardous reactions are foreseeable in normal conditions of use and storage.

**10.4. Conditions to avoid**

None in particular. However the usual precautions used for chemical products should be respected.

**10.5. Incompatible materials**

Information not available

**10.6. Hazardous decomposition products**

Information not available

**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

Information not available

Information on likely routes of exposure

Information not available

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

Information not available

Interactive effects

Information not available

ACUTE TOXICITY

ATE (Inhalation - mists / powders) of the mixture:	> 5 mg/l
ATE (Oral) of the mixture:	>2000 mg/kg
ATE (Dermal) of the mixture:	>2000 mg/kg

Corrosive to the respiratory tract.

DIETHYLENE GLYCOL

LD50 (Dermal):	11890 mg/kg Rabbit
LD50 (Oral):	12565 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)

2-OCTYL-2H-ISOTHIAZOL-3-ONE

LD50 (Dermal):	311 mg/kg
LD50 (Oral):	125 mg/kg Rat
LC50 (Inhalation mists/powders):	0.27 mg/l/4h Rat

Quaternary ammonium compounds, benzyl-C12-14-alkyldimethyl, chlorides

LD50 (Dermal):	3412 mg/kg
LD50 (Oral):	795 mg/kg

SKIN CORROSION / IRRITATION

Does not meet the classification criteria for this hazard class

SERIOUS EYE DAMAGE / IRRITATION

Does not meet the classification criteria for this hazard class

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

**SECTION 11. Toxicological information** ... / >>REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

STOT - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

**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 is toxic for aquatic organisms. In the long term, it has negative effects on the aquatic environment.

**12.1. Toxicity**

2-OCTYL-2H-ISOTHIAZOL-3-ONE	
EC50 - for Algae / Aquatic Plants	0.00129 mg/l/72h Navicula pelliculosa
EC10 for Algae / Aquatic Plants	0.000224 mg/l/72h Navicula pelliculosa

Quaternary ammonium compounds, benzyl-C12-14-alkyldimethyl, chlorides	
LC50 - for Fish	0.515 mg/l/96h
EC50 - for Crustacea	0.016 mg/l/48h
EC50 - for Algae / Aquatic Plants	0.03 mg/l/72h
Chronic NOEC for Fish	0.0322 mg/l
Chronic NOEC for Crustacea	0.0125 mg/l
Chronic NOEC for Algae / Aquatic Plants	0.0025 mg/l

**12.2. Persistence and degradability**

DIETHYLENE GLYCOL	
Solubility in water	1000 - 10000 mg/l
Rapidly degradable	

2-OCTYL-2H-ISOTHIAZOL-3-ONE	
Solubility in water	500 mg/l
NOT rapidly degradable	

**12.3. Bioaccumulative potential**

DIETHYLENE GLYCOL	
Partition coefficient: n-octanol/water	-1.98
BCF	100

2-OCTYL-2H-ISOTHIAZOL-3-ONE	
Partition coefficient: n-octanol/water	2.61
BCF	19.21

**12.4. Mobility in soil**

2-OCTYL-2H-ISOTHIAZOL-3-ONE	
Partition coefficient: soil/water	2.25

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



**SECTION 12. Ecological information** ... / >>

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.

The management of waste arising from the use or dispersal of this product must be organised in accordance with occupational safety regulations. See section 8 for possible need for PPE.

**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 3082

ADR / RID: In accordance with Special Provision 375, this product, when is packed in receptacles of a capacity  $\leq$  5Kg or 5L, is not submitted to ADR provisions.

IMDG: In accordance with Section 2.10.2.7 of IMDG Code, this product, when is packed in receptacles of a capacity  $\leq$  5Kg or 5L, is not submitted to IMDG Code provisions.

IATA: In accordance with SP A197, this product, when is packed in receptacles of a capacity  $\leq$  5Kg or 5L, is not submitted to IATA dangerous goods regulations.

**14.2. UN proper shipping name**

ADR / RID: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Quaternary ammonium compounds, benzyl-C12-14-alkyldimethyl, chlorides; 2-OCTYL-2H-ISOTHIAZOL-3-ONE)

IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Quaternary ammonium compounds, benzyl-C12-14-alkyldimethyl, chlorides; 2-OCTYL-2H-ISOTHIAZOL-3-ONE)

IATA: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Quaternary ammonium compounds, benzyl-C12-14-alkyldimethyl, chlorides; 2-OCTYL-2H-ISOTHIAZOL-3-ONE)

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

ADR / RID: Class: 9 Label: 9

IMDG: Class: 9 Label: 9

IATA: Class: 9 Label: 9

**14.4. Packing group**

ADR / RID, IMDG, IATA: III

**SECTION 14. Transport information ... / >>****14.5. Environmental hazards**

ADR / RID: Environmentally Hazardous

IMDG: Marine Pollutant

IATA: Environmentally Hazardous

**14.6. Special precautions for user**

ADR / RID:	HIN - Kemler: 90	Limited Quantities: 5 lt	Tunnel restriction code: (-)
	Special provision: 274, 335, 375, 601		
IMDG:	EMS: F-A, S-F	Limited Quantities: 5 lt	
IATA:	Cargo:	Maximum quantity: 450 L	Packaging instructions: 964
	Passengers:	Maximum quantity: 450 L	Packaging instructions: 964
	Special provision:	A97, A158, A197, A215	

**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: E2

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

<u>Product</u>		
Point	3	
<u>Contained substance</u>		
Point	75	DIETHYLENE GLYCOL
Point	75	2-OCTYL-2H-ISOTHIAZOL-3-ONE
		REACH Reg.: Biocida

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  $\geq$  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.

**15.2. Chemical safety assessment**

A chemical safety assessment has not been performed for the preparation/for the substances indicated in section 3.

**SECTION 16. Other information**

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

<b>Acute Tox. 2</b>	Acute toxicity, category 2
<b>Acute Tox. 3</b>	Acute toxicity, category 3
<b>Acute Tox. 4</b>	Acute toxicity, category 4
<b>Skin Corr. 1B</b>	Skin corrosion, category 1B
<b>Skin Corr. 1</b>	Skin corrosion, category 1
<b>Skin Sens. 1A</b>	Skin sensitization, category 1A
<b>Aquatic Acute 1</b>	Hazardous to the aquatic environment, acute toxicity, category 1
<b>Aquatic Chronic 1</b>	Hazardous to the aquatic environment, chronic toxicity, category 1
<b>Aquatic Chronic 2</b>	Hazardous to the aquatic environment, chronic toxicity, category 2
<b>H330</b>	Fatal if inhaled.
<b>H301</b>	Toxic if swallowed.
<b>H311</b>	Toxic in contact with skin.
<b>H302</b>	Harmful if swallowed.
<b>H314</b>	Causes severe skin burns and eye damage.
<b>H317</b>	May cause an allergic skin reaction.
<b>H400</b>	Very toxic to aquatic life.
<b>H410</b>	Very toxic to aquatic life with long lasting effects.
<b>H411</b>	Toxic to aquatic life with long lasting effects.
<b>EUH071</b>	Corrosive to the respiratory tract.

**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).

**GENERAL BIBLIOGRAPHY**

1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
3. Regulation (EU) 2020/878 (II Annex of REACH Regulation)
4. Regulation (EC) 790/2009 (I Atp. CLP) of the European Parliament
5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament

**SECTION 16. Other information ... / >>**

9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament
11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament
12. Regulation (EU) 2016/1179 (IX Atp. CLP)
13. Regulation (EU) 2017/776 (X Atp. CLP)
14. Regulation (EU) 2018/669 (XI Atp. CLP)
15. Regulation (EU) 2019/521 (XII Atp. CLP)
16. Delegated Regulation (UE) 2018/1480 (XIII Atp. CLP)
17. Regulation (EU) 2019/1148
18. Delegated Regulation (UE) 2020/217 (XIV Atp. CLP)
19. Delegated Regulation (UE) 2020/1182 (XV Atp. CLP)
20. Delegated Regulation (UE) 2021/643 (XVI Atp. CLP)
21. Delegated Regulation (UE) 2021/849 (XVII Atp. CLP)
22. Delegated Regulation (UE) 2022/692 (XVIII Atp. CLP)
23. Delegated Regulation (UE) 2023/707
24. Delegated Regulation (UE) 2023/1434 (XIX Atp. CLP)
25. Delegated Regulation (UE) 2023/1435 (XX Atp. CLP)
26. Delegated Regulation (UE) 2024/197 (XXI Atp. CLP)

- The Merck Index. - 10th Edition
- Handling Chemical Safety
- INRS - Fiche Toxicologique (toxicological sheet)
- Patty - Industrial Hygiene and Toxicology
- N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
- IFA GESTIS website
- ECHA website
- Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy

**Note for users:**

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

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

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

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

**CALCULATION METHODS FOR CLASSIFICATION**

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

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

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