



## Barrier Oltre

# 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

Code: 455649  
Product name: Barrier Oltre

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

Identified Uses	Industrial	Professional	Consumer
Mural mortar.	-	✓	-

#### Uses Advised Against

All uses other than application on mural surfaces in construction.

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

Name: CROMOLOGY ITALIA S.P.A.  
Full address: Via IV Novembre, 4  
District and Country: 55016 Porcari (LU)  
Italia  
Tel. 199.11.99.55  
Fax 199.11.99.77

e-mail address of the competent person responsible for the Safety Data Sheet: info-sds@cromology.it

### 1.4. Emergency telephone number

For urgent inquiries refer to: Contact your local poison control centre.  
For more information: Cromology Italia SpA Phone +39 05832424  
from Monday to Friday 9:30-12:30 14:00-17:30

## 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:

Hazardous to the aquatic environment, chronic toxicity, category 3 H412 Harmful to aquatic life with long lasting effects.

### 2.2. Label elements

**Barrier Oltre**

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

Hazard pictograms: --

Signal words: --

Hazard statements:

**H412** Harmful to aquatic life with long lasting effects.

**EUH208** Contains: Reaction mass of 5-chloro-2-methyl-1,2-thiazol-3(2H)-one and 2-methyl-1,2-thiazol-3(2H)-one (3: 1) (C(M)IT/MIT), 1,2-BENZOISOTIAZOL-3(2H)-ONE (BIT)  
May produce an allergic reaction.

Precautionary statements:

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

**P102** Keep out of reach of children.

**P273** Avoid release to the environment.

**P501** Dispose of contents/container according to local regulation.

### 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>1,2-BENZOISOTIAZOL-3(2H)-ONE (BIT)</b>		
INDEX 613-088-00-6	0,035	Acute Tox. 4 H302, Eye Dam. 1 H318, Skin Irrit. 2 H315, Skin Sens. 1A H317, Aquatic Acute 1 H400 M=1, Aquatic Chronic 2 H411 Skin Sens. 1A H317: $\geq$ 0,05%
EC 220-120-9		
CAS 2634-33-5		LD50 Oral: 532 mg/kg
REACH Reg. 01-2120761540-60		
<b>ZINC PYRITHION</b>		
INDEX 613-333-00-7	0,015	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 LD50 Oral: 221 mg/kg, LC50 Inhalation mists/powders: 0,14 mg//4h
EC 236-671-3		
CAS 13463-41-7		

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**Reaction mass of 5-chloro-2-methyl-1,2-thiazol-3(2H)-one and 2-methyl-1,2-thiazol-3(2H)-one (3: 1) (C(M)IT/MIT)**

INDEX 613-167-00-5

0,001

Acute Tox. 2 H310, Acute Tox. 2 H330, Acute Tox. 3 H301, Skin Corr. 1C H314, Eye Dam. 1 H318, Skin Sens. 1A H317, Aquatic Acute 1 H400 M=100, Aquatic Chronic 1 H410 M=100, EUH071, Classification note according to Annex VI to the CLP Regulation: B

EC 611-341-5

Skin Corr. 1C H314:  $\geq 0,6\%$ , Skin Irrit. 2 H315:  $\geq 0,06\%$ , Skin Sens. 1A H317:  $\geq 0,0015\%$ , Eye Dam. 1 H318:  $\geq 0,6\%$ , Eye Irrit. 2 H319:  $\geq 0,06\%$

CAS 55965-84-9

LD50 Oral: 66 mg/kg, LD50 Dermal: >141 mg/kg, STA Inhalation mists/powders: 0,051 mg/l, STA Inhalation vapours: 0,501 mg/l

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. Wash immediately with plenty of water. If irritation persists, get medical advice/attention. Wash contaminated clothing before using it again.

INHALATION: Remove to open air. In the event of breathing difficulties, get medical advice/attention immediately.

INGESTION: Get medical advice/attention. Induce vomiting only if indicated by the doctor. Never give anything by mouth to an unconscious person, unless authorised by a doctor.

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

Information not available

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

Information not available

## 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.

**Barrier Oltre****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. Wash hands after use.

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

Keep the product in clearly labelled containers. Store the containers sealed, in a well ventilated place, away from direct sunlight.

**7.3. Specific end use(s)**

Information not available

**SECTION 8. Exposure controls/personal protection****8.1. Control parameters**

Information not available

**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.

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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.

**HAND PROTECTION**

Protect hands with chemical resistant gloves (EN 374).

In the case of mixtures, the resistance of work gloves to chemical agents must be checked before use as it is not always predictable.

Materials also suitable for direct and prolonged contact, it is recommended: protection factor 6,> 480 minutes of permeation time (EN 374); neoprene, nitrile rubber and others. Additional information: Information is based on our experience, bibliographic data and information from glove manufacturers, or derived from substances / mixtures of similar composition. The duration of use of a protective glove can be influenced by various factors such as temperature and therefore in practice significantly lower than the permeation time detected by the test.

Due to the great variety of types, it is advisable to observe the instructions for use of the glove manufacturers.

**SKIN PROTECTION**

Wear category I 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 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.

**SECTION 9. Physical and chemical properties**

**9.1. Information on basic physical and chemical properties**

Properties	Value	Information
Appearance	liquid	
Colour	light grey	
Odour	light, characteristic	
Melting point / freezing point	not available	
Initial boiling point	not available	
Flammability	not flammable	
Lower explosive limit	not available	
Upper explosive limit	not available	
Flash point	> 60 °C	Method:Derived
Auto-ignition temperature	not available	
Decomposition temperature	not available	
pH	8,5-10	Method:ISO 19396-1
Kinematic viscosity	not available	Reason for missing data:Not significant data for classification
Solubility	not available	
Partition coefficient: n-octanol/water	not available	

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Vapour pressure	not available	
Density and/or relative density	1,6 kg/l	Method:ISO 2811-1 Temperature: 20 °C
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**

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

**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.

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

Reaction mass of 5-chloro-2-methyl-1,2-thiazol-3(2H)-one and 2-methyl-1,2-thiazol-3(2H)-one (3: 1) (C(M)IT/MIT)

LD50 (Dermal):	> 141 mg/kg Rat OECD 402
LD50 (Oral):	66 mg/kg Rat OECD 401

1,2-BENZOISOTIAZOL-3(2H)-ONE (BIT)

LD50 (Oral):	532 mg/kg
LC50 (Inhalation mists/powders):	0,4 mg/l/4h

CALCIUM CARBONATE

LD50 (Oral):	6450 mg/kg Rat
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ZINC PYRITHION



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

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

May produce an allergic reaction.

Contains:

Reaction mass of 5-chloro-2-methyl-1,2-thiazol-3(2H)-one and 2-methyl-1,2-thiazol-3(2H)-one (3: 1) (C(M)IT/MIT)  
1,2-BENZOISOTIAZOL-3(2H)-ONE (BIT)

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

STOT - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class

STOT - REPEATED EXPOSURE



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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 the aquatic organisms. In the long term, it have negative effects on aquatic environment.

**12.1. Toxicity**

Reaction mass of 5-chloro-2-methyl-1,2-thiazol-3(2H)-one and 2-methyl-1,2-thiazol-3(2H)-one (3: 1) (C(M)IT/MIT)  
LC50 - for Fish

0,22 mg/l/96h Oncorhynchus mykiss

EC50 - for Crustacea

0,0052 mg/l/48h Daphnia magna

EC50 - for Algae / Aquatic Plants

0,048 mg/l/72h Pseudokirchnerella subcapitata

Chronic NOEC for Fish

0,098 mg/l Onchorthyncus Mykiss (OECD 210)

Chronic NOEC for Crustacea

0,004 mg/l Daphnia magna (OECD 211)

Chronic NOEC for Algae / Aquatic Plants

0,00064 mg/l Skeletonema costantium (ISO 10263, RAC)

1,2-BENZOISOTIAZOL-3(2H)-ONE (BIT)

LC50 - for Fish

11 mg/l/96h Oncorhynchus mykiss (OECD 203)

EC50 - for Crustacea

16,4 mg/l/48h Daphnia magna (OECD 202)

EC50 - for Algae / Aquatic Plants

0,6 mg/l/72h Selenastrum capricornutum (OECD 201)

ZINC PYRITHION

LC50 - for Fish

0,0104 mg/l/96h Brachydanio rerio (OECD 203)

EC50 - for Crustacea

0,0006 mg/l/48h RAC-Opinion 2018 (US-EPA 123-2)

EC50 - for Algae / Aquatic Plants

0,0013 mg/l/72h Selenastrum capricornutum (OECD 201)

Chronic NOEC for Fish

0,00125 mg/l 72h Brachydanio rerio (OECD 215)

Chronic NOEC for Crustacea

0,0022 mg/l 21d Daphnia Magna

Chronic NOEC for Algae / Aquatic Plants

0,00046 mg/l 96h Skeletonema costatum

**12.2. Persistence and degradability**

Reaction mass of 5-chloro-2-methyl-1,2-thiazol-3(2H)-one and 2-methyl-1,2-thiazol-3(2H)-one (3: 1) (C(M)IT/MIT)  
Rapidly degradable

**12.3. Bioaccumulative potential**

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Reaction mass of 5-chloro-2-methyl-1,2-thiazol-3(2H)-one and 2-methyl-1,2-thiazol-3(2H)-one (3: 1) (C(M)IT/MIT)

BCF 3,6 Calculated

1,2-BENZOISOTIAZOL-3(2H)-ONE (BIT)

Partition coefficient: n-octanol/water 0,7 n-Octanol/Water, OECD 117

BCF 6,95 Pesce (OECD 305)

ZINC PYRITHION

Partition coefficient: n-octanol/water 1,21 Log Kow n-octanol/water S2781

**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  $\geq$  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.

CONTAMINATED PACKAGING

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

**SECTION 14. Transport information**

The product is not dangerous under current provisions of the Code of International Carriage of Dangerous Goods by Road (ADR) and by Rail (RID), of the International Maritime Dangerous Goods Code (IMDG), and of the International Air Transport Association (IATA) regulations.

**14.1. UN number or ID number**

**Barrier Oltre**

not applicable

**14.2. UN proper shipping name**

not applicable

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

not applicable

**14.4. Packing group**

not applicable

**14.5. Environmental hazards**

not applicable

**14.6. Special precautions for user**

not applicable

**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: None

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

Product

**Barrier Oltre**

Point 3

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  $\geq$  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

Information not available

Contains biocidal products.

**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:

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

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<b>Skin Corr. 1C</b>	Skin corrosion, category 1C
<b>Eye Dam. 1</b>	Serious eye damage, category 1
<b>Skin Irrit. 2</b>	Skin irritation, category 2
<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>Aquatic Chronic 3</b>	Hazardous to the aquatic environment, chronic toxicity, category 3
<b>H360D</b>	May damage the unborn child.
<b>H310</b>	Fatal in contact with skin.
<b>H330</b>	Fatal if inhaled.
<b>H301</b>	Toxic if swallowed.
<b>H302</b>	Harmful if swallowed.
<b>H372</b>	Causes damage to organs through prolonged or repeated exposure.
<b>H314</b>	Causes severe skin burns and eye damage.
<b>H318</b>	Causes serious eye damage.
<b>H315</b>	Causes skin irritation.
<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>H412</b>	Harmful 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 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

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- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

**GENERAL BIBLIOGRAPHY**

1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
  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
  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)
- 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.