

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: **0460465P**
Product name: **SMERALD PISCINE**

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

Intended use: **Protective concrete enamel specific for plastered swimming pools**

1.3. Details of the supplier of the safety data sheet

Name: **AZICHEM SRL**
Full address: **Via G. Gentile 16/A**
District and Country: **46044 Goito (Mantova) Italia**
Tel.: **0376604185**
e-mail address of the competent person responsible for the Safety Data Sheet: **laboratorio@azichem.com**

1.4. Emergency telephone number

For urgent inquiries refer to:
Osp. Pediatrico Bambino Gesù ROMA: 06 68593726
Az. Osp. Univ. Foggia FOGGIA: 800183459
Az. Osp. "A. Cardarelli" NAPOLI: 081-5453333
Policlinico "Umberto I" ROMA: 06-49978000
Policlinico "A. Gemelli" ROMA: 06-3054343
Az. Osp. "Careggi" U.O. Tossicologia Medica FIRENZE: 055-7947819
Centro Nazionale di Informazione Tossicologica PAVIA: 0382-24444
Osp. Niguarda Ca' Granda MILANO: 02-66101029
Azienda Ospedaliera Papa Giovanni XXII BERGAMO: 800883300
Azienda Ospedaliera Integrata VERONA: 800011858

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

The product is not classified as hazardous pursuant to the provisions set forth in EC Regulation 1272/2008 (CLP). However, since the product contains hazardous substances in concentrations such as to be declared in section no. 3, it requires a safety data sheet with appropriate information, compliant to (EU) Regulation 2020/878.

Hazard classification and indication: --

2.2. Label elements

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

Hazard pictograms: --

Signal words: --

Hazard statements:

EUH210

EUH208

Safety data sheet available on request.

Contains: MIXTURE OF: 5-CHLORO-2-METHYL-2H-ISOTHIAZOL-3-ONE [N. CE 247-500-7];
2-METHYL-2H-ISOTHIAZOL-3-ONE [No. CE 220-239-6] (3:1)
1,2-BENZISOTHIAZOL-3(2H)-ONE

May produce an allergic reaction.

Precautionary statements: --

SECTION 2. Hazards identification ... / >>

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	x = Conc. %	Classification (EC) 1272/2008 (CLP)
1,2-BENZISOTHIAZOL-3(2H)-ONE		
INDEX 613-088-00-6	$0 \leq x < 0,05$	Acute Tox. 4 H302, Eye Dam. 1 H318, Skin Irrit. 2 H315, Skin Sens. 1 H317, Aquatic Acute 1 H400 M=1, Aquatic Chronic 2 H411
EC 220-120-9		Skin Sens. 1 H317: $\geq 0,05\%$
CAS 2634-33-5		LD50 Oral: 490 mg/kg
REACH Reg. 01-2120761540-60-xxxx		
MIXTURE OF: 5-CHLORO-2-METHYL-2H- ISOTHIAZOL-3-ONE [N. CE 247-500-7]; 2-METHYL-2H-ISOTHIAZOL-3-ONE [No. CE 220-239-6] (3:1)		
INDEX 613-167-00-5	$0 \leq x < 0,0015$	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
EC		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: 200 mg/kg, LD50 Dermal: 87,12 mg/kg, LC50 Inhalation mists/powders: 0,33 mg/l/4h
REACH Reg. 01-2120764691-48-xxxx		

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

SECTION 4. First aid measures

4.1. Description of first aid measures

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 30-60 minutes, opening the eyelids fully. Get medical advice/attention.

SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention.

INGESTION: Have the subject drink as much water as possible. Get medical advice/attention. Do not induce vomiting unless explicitly authorised by a doctor.

INHALATION: Get medical advice/attention immediately. Remove victim to fresh air, away from the accident scene. If the subject stops breathing, administer artificial respiration. Take suitable precautions for rescue workers.

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

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

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

Information not available

SECTION 5. Firefighting 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.

SECTION 5. Firefighting measures ... / >>**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**

SECTION 8. Exposure controls/personal protection ... / >>

1,2-BENZISOTHIAZOL-3(2H)-ONE

Predicted no-effect concentration - PNEC

Normal value in fresh water	0,00403	mg/l
Normal value in marine water	0,000403	mg/l
Normal value for fresh water sediment	0,0499	mg/kg/d
Normal value for marine water sediment	0,0499	mg/kg/d
Normal value for marine water, intermittent release	0,0011	mg/l
Normal value for fresh water, intermittent release	0,00011	mg/l
Normal value of STP microorganisms	103	mg/l
Normal value for the terrestrial compartment	3	mg/kg/d

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers		Chronic local	Chronic systemic	Effects on workers		
	Acute local	Acute systemic			Acute local	Acute systemic	Chronic local
Inhalation				1,2 mg/m3			6,81 mg/m3
Skin	LOW		LOW	0,345 mg/kg bw/d	LOW		0,966 mg/kg bw/d

MIXTURE OF: 5-CHLORO-2-METHYL-2H- ISOTHIAZOL-3-ONE [N. CE 247-500-7]; 2-METHYL-2H-ISOTHIAZOL-3-ONE

[No. CE 220-239-6] (3:1)

Predicted no-effect concentration - PNEC

Normal value in fresh water	0,00339	mg/l
Normal value in marine water	0,00339	mg/l
Normal value for fresh water sediment	0,027	mg/kg/d
Normal value for marine water sediment	0,027	mg/kg/d
Normal value for marine water, intermittent release	0,00339	mg/l
Normal value for fresh water, intermittent release	0,00339	mg/l
Normal value of STP microorganisms	0,25	mg/l
Normal value for the terrestrial compartment	0,01	mg/kg/d

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers		Chronic local	Chronic systemic	Effects on workers		
	Acute local	Acute systemic			Acute local	Acute systemic	Chronic local
Oral		0,11 mg/kg bw/d		0,09 mg/kg bw/d			
Inhalation	0,04 mg/m3		0,02 mg/m3		0,04 mg/m3		0,02 mg/m3
Skin	MED				MED		

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.

HAND PROTECTION

Protect hands with category III work gloves.

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

The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

SKIN PROTECTION

Wear category 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 ISO 16321).

RESPIRATORY PROTECTION

None required, unless indicated otherwise in the chemical risk assessment.

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	dense liquid	
Colour	various	
Odour	not available	
Melting point / freezing point	not available	
Initial boiling point	102 °C	
Flammability	not available	
Lower explosive limit	not available	
Upper explosive limit	not available	
Flash point	not available	
Auto-ignition temperature	292 °C	
Decomposition temperature	not available	
pH	8,5	
Kinematic viscosity	not available	
Solubility	not available	
Partition coefficient: n-octanol/water	not available	
Vapour pressure	2342 Pa	Temperature: 20 °C
Density and/or relative density	1,976 g/cm ³	
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

1,2-BENZISOTHIAZOL-3(2H)-ONE
Oxidizing agents, acids, reducing agents.

MIXTURE OF: 5-CHLORO-2-METHYL-2H- ISOTHIAZOL-3-ONE [N. CE 247-500-7]; 2-METHYL-2H-ISOTHIAZOL-3-ONE [No. CE 220-239-6]
(3:1)
Oxidizing agents, Amines, Reducing agents, Mercaptans.

10.6. Hazardous decomposition products

1,2-BENZISOTHIAZOL-3(2H)-ONE
Sulfur oxides, nitrogen oxides.

SECTION 11. Toxicological information

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)

1,2-BENZISOTHIAZOL-3(2H)-ONE

LD50 (Dermal):	> 2000 mg/kg
LD50 (Oral):	490 mg/kg

MIXTURE OF: 5-CHLORO-2-METHYL-2H- ISOTHIAZOL-3-ONE [N. CE 247-500-7]; 2-METHYL-2H-ISOTHIAZOL-3-ONE [No. CE 220-239-6] (3:1)

LD50 (Dermal):	87,12 mg/kg Coniglio maschio C(M)IT/MIT (14%) (OECD 402)- opinion RAC
LD50 (Oral):	200 mg/kg
LC50 (Inhalation mists/powders):	0,33 mg/l/4h

1,2-BENZISOTHIAZOL-3(2H)-ONE

Method: equivalent or similar to OECD 401

Reliability (Klimisch score): 1

Species: rat (Wistar; male/female)

Routes of exposure: oral

Results: LD50 = 490 mg/kg. The substance is classified as acute oral toxicant Cat. 4 (Harmonized classification, CLP Reg., Annex VI)

Method: OECD 402

Reliability (Klimisch score): 2

Species: rat (CD; male/female)

Routes of exposure: dermal

LD50 results: > 2000 mg/kg.

MIXTURE OF: 5-CHLORO-2-METHYL-2H- ISOTHIAZOL-3-ONE [N. CE 247-500-7]; 2-METHYL-2H-ISOTHIAZOL-3-ONE [No. CE 220-239-6] (3:1)

Method: OECD 423

Reliability (Klimisch score): 1

Species: Rat (Wistar; female)

Routes of exposure: oral

Results: LD50 200 mg/kg

Method: OECD 403

Reliability (Klimisch score): 1

Species: rat (CrI:CD BR; male/female)

Routes of exposure: inhalation

Results: LC50 0.33 mg/l/4h (aerosol)

Reliability (Klimisch score): 2

Species: rabbit (Albino)

Routes of exposure: dermal

Results: LD50 87.12 mg/kg (C(M)IT/MIT 14%)

Bibliographical reference: Craig 1993

SECTION 11. Toxicological information ... / >>SKIN CORROSION / IRRITATION

Does not meet the classification criteria for this hazard class

1,2-BENZISOTHIAZOL-3(2H)-ONE

The substance is classified as a skin irritant Cat. 2 (Harmonised classification, CLP Reg., Annex VI).

MIXTURE OF: 5-CHLORO-2-METHYL-2H- ISOTHIAZOL-3-ONE [N. CE 247-500-7]; 2-METHYL-2H-ISOTHIAZOL-3-ONE [No. CE 220-239-6] (3:1)

Method: OECD 404

Reliability (Klimisch score): 1

Species: rabbit (New Zealand White)

Routes of exposure: dermal

Results: corrosive to the skin. SCL (specific concentration limit $C \geq 0.6\%$ - Reg. (EU) 2018/1480)

SERIOUS EYE DAMAGE / IRRITATION

Does not meet the classification criteria for this hazard class

1,2-BENZISOTHIAZOL-3(2H)-ONE

Method: Equivalent or similar to EPA OPP 81-4

Reliability (Klimisch score): 1

Species: rabbit (New Zealand White)

Routes of exposure: ocular

Results: causes serious eye damage (Harmonised classification, CLP Reg., Annex VI).

MIXTURE OF: 5-CHLORO-2-METHYL-2H- ISOTHIAZOL-3-ONE [N. CE 247-500-7]; 2-METHYL-2H-ISOTHIAZOL-3-ONE [No. CE 220-239-6] (3:1)

Method: OECD 405

Reliability (Klimisch score): 1

Species: rabbit (New Zealand White)

Routes of exposure: ocular

Results: corrosive to the eyes

SCL (specific concentration limit - Reg. (EU) 2018/1480)

H318 cat.1 $C \geq 0.6\%$

H319 cat. 2 $0.06\% \leq C < 0.6\%$

RESPIRATORY OR SKIN SENSITISATION

May produce an allergic reaction.

Contains:

MIXTURE OF: 5-CHLORO-2-METHYL-2H- ISOTHIAZOL-3-ONE [N. CE 247-500-7]; 2-METHYL-2H-ISOTHIAZOL-3-ONE [No. CE 220-239-6] (3:1)

1,2-BENZISOTHIAZOL-3(2H)-ONE

Skin sensitization**1,2-BENZISOTHIAZOL-3(2H)-ONE**

Method: Equivalent or similar to EPA OPP 81-6

Reliability (Klimisch score): 1

Species: Guinea pig (Dunkin-Hartley; female)

Routes of exposure: dermal

Results: skin sensitizer (Harmonized classification, CLP Reg., Annex VI).

MIXTURE OF: 5-CHLORO-2-METHYL-2H- ISOTHIAZOL-3-ONE [N. CE 247-500-7]; 2-METHYL-2H-ISOTHIAZOL-3-ONE [No. CE 220-239-6] (3:1)

Bibliographic reference: National Institutes of Health Publication N° 99-449, Appendix J, 1999

Local lymph node testing. (LLNA)

Reliability (Klimisch score): 1

Species: mouse (CBA/J; female)

Results: skin sensitiser, cat 1A

SCL (specific concentration limit) (Reg. (EU) 2018/1480): $C \geq 0.0015\%$

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

SECTION 11. Toxicological information ... / >>**1,2-BENZISOTHIAZOL-3(2H)-ONE**

Method: OECD 476 - In vitro test

Reliability (Klimisch score): 1

Species: L5178Y murine lymphoma cells

Results: negative with no metabolic activation

Method: OECD 486

Reliability (Klimisch score): 1

Species: Rat (Han Wistar; male)

Routes of exposure: oral

Results: negative.

MIXTURE OF: 5-CHLORO-2-METHYL-2H- ISOTHIAZOL-3-ONE [N. CE 247-500-7]; 2-METHYL-2H-ISOTHIAZOL-3-ONE [No. CE 220-239-6] (3:1)

Method: OECD 482 - In vitro test

Reliability (Klimisch score): 1

Results: Negative

Method: OECD 475 - In vivo test

Reliability (Klimisch score): 1

Routes of exposure: oral

Species: mouse (CD-1)

Results: Negative

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

1,2-BENZISOTHIAZOL-3(2H)-ONE

Based on available data, the substance does not have carcinogenic effects and is not classified under the relevant CLP hazard class of carcinogenicity.

MIXTURE OF: 5-CHLORO-2-METHYL-2H- ISOTHIAZOL-3-ONE [N. CE 247-500-7]; 2-METHYL-2H-ISOTHIAZOL-3-ONE [No. CE 220-239-6] (3:1)

Based on available data, the substance does not have carcinogenic effects and is not classified under the CLP hazard class of carcinogenicity.

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

1,2-BENZISOTHIAZOL-3(2H)-ONE

Method: EPA OPPTS 870.3800

Reliability (Klimisch score): 1

Species: rat (W(Glx/BRL/Han)BR; female)

Routes of exposure: oral

Results: negative. NOAEL (P0) = 112 mg/kg body weight/day; NOAEL (F1) = 56.6 mg/kg body weight/day; NOAEL (F2a) = 56.6 mg/kg body weight/day.

Adverse effects on sexual function and fertility**MIXTURE OF: 5-CHLORO-2-METHYL-2H- ISOTHIAZOL-3-ONE [N. CE 247-500-7]; 2-METHYL-2H-ISOTHIAZOL-3-ONE [No. CE 220-239-6] (3:1)**

Method: OECD 416

Reliability (Klimisch score): 1

Species: rat CrI:CD BR

Routes of exposure: oral

Results: Negative. NOAEL = 300 ppm.

Adverse effects on development of the offspring**MIXTURE OF: 5-CHLORO-2-METHYL-2H- ISOTHIAZOL-3-ONE [N. CE 247-500-7]; 2-METHYL-2H-ISOTHIAZOL-3-ONE [No. CE 220-239-6] (3:1)**

Method: EPA OPP 83-3

Reliability (Klimisch score): 1

Species: rat (Sprague-Dawley)

Routes of exposure: oral

Results: LOAEL = 28 mg/kg. No signs of teratogenicity or embryotoxicity.

STOT - SINGLE EXPOSURE

SECTION 11. Toxicological information ... / >>

Does not meet the classification criteria for this hazard class

1,2-BENZISOTHIAZOL-3(2H)-ONE

Based on available data, the substance does not present specific target organ toxicity effects for single exposure and is not classified under the relevant CLP hazard class.

MIXTURE OF: 5-CHLORO-2-METHYL-2H- ISOTHIAZOL-3-ONE [N. CE 247-500-7]; 2-METHYL-2H-ISOTHIAZOL-3-ONE [No. CE 220-239-6] (3:1)

Based on available data, the substance does not present specific target organ toxicity effects for single exposure and is not classified under the relevant CLP hazard class.

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

1,2-BENZISOTHIAZOL-3(2H)-ONE

Method: EPA OPP 82-1

Reliability (Klimisch score): 1

Species: rat (Alpk:AfSD Male/Female)

Routes of exposure: oral

Results: negative. NOAEL = 69 mg/kg body weight/day.

MIXTURE OF: 5-CHLORO-2-METHYL-2H- ISOTHIAZOL-3-ONE [N. CE 247-500-7]; 2-METHYL-2H-ISOTHIAZOL-3-ONE [No. CE 220-239-6] (3:1)

Method: OECD 409

Reliability (Klimisch score): 1

Species: dog (beagle)

Routes of exposure: oral

Results: Negative. NOAEL = 22 mg/kg

Method: OECD 413

Reliability (Klimisch score): 1

Species: mouse (CrI:CD(SD)BR)

Routes of exposure: inhalation (aerosol)

Results: Negative. NOAEL = 0.34 mg/m³

Method: EPA OPP 82-3

Reliability (Klimisch score): 1

Species: rat (Sprague-Dawley)

Routes of exposure: dermal

Results: Negative. NOAEL (systemic toxicity): 18.75 mg/kg body weight/day. NOAEL (local irritation): 0.75 mg/kg body weight/day

ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

1,2-BENZISOTHIAZOL-3(2H)-ONE

There are no data available on the danger in case of aspiration.

MIXTURE OF: 5-CHLORO-2-METHYL-2H- ISOTHIAZOL-3-ONE [N. CE 247-500-7]; 2-METHYL-2H-ISOTHIAZOL-3-ONE [No. CE 220-239-6] (3:1)

There are no data available on the danger in case of aspiration.

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

Use this product according to good working practices. Avoid littering. Inform the competent authorities, should the product reach waterways or contaminate soil or vegetation.

12.1. Toxicity**1,2-BENZISOTHIAZOL-3(2H)-ONE**

LC50 - for Fish

EC50 - for Crustacea

EC50 - for Algae / Aquatic Plants

Chronic NOEC for Algae / Aquatic Plants

2,15 mg/l/96h Oncorhynchus mykiss (OECD 203)

2,9 mg/l/48h Daphnia Magna (OECD 202)

0,07 mg/l/72h Pseudokirchneriella subcapitata (OECD 201)

0,0403 mg/l (72h) Selenastrum capricornutum (OECD 201)

SECTION 12. Ecological information ... / >>

MIXTURE OF: 5-CHLORO-2-METHYL-2H- ISOTHIAZOL-3-ONE [N. CE 247-500-7]; 2-METHYL-2H-ISOTHIAZOL-3-ONE [No. CE 220-239-6] (3:1)

LC50 - for Fish	0,19 mg/l/96h Oncorhynchus mykiss (EPA OPP 72-1)
EC50 - for Crustacea	0,16 mg/l/48h Daphnia magna (EPA OPP 72-2)
EC50 - for Algae / Aquatic Plants	0,0052 mg/l/48h Skeletonema costatum (OECD 201 - US EPA OPPTS 850.5400)
Chronic NOEC for Fish	> 0,0464 mg/l/35 giorni Danio rerio (OECD 210)
Chronic NOEC for Algae / Aquatic Plants	0,00049 mg/l/48 h Skeletonema costatum (OECD 201 - US EPA OPPTS 850.5400)

12.2. Persistence and degradability

MIXTURE OF: 5-CHLORO-2-METHYL-2H- ISOTHIAZOL-3-ONE [N. CE 247-500-7]; 2-METHYL-2H-ISOTHIAZOL-3-ONE [No. CE 220-239-6] (3:1)
NOT rapidly degradable (OECD 301B)

1,2-BENZISOTHIAZOL-3(2H)-ONE
NOT rapidly degradable 62% in 4 giorni (OECD 301 C)

MIXTURE OF: 5-CHLORO-2-METHYL-2H- ISOTHIAZOL-3-ONE [N. CE 247-500-7]; 2-METHYL-2H-ISOTHIAZOL-3-ONE [No. CE 220-239-6] (3:1)
NOT rapidly degradable

12.3. Bioaccumulative potential

1,2-BENZISOTHIAZOL-3(2H)-ONE
Partition coefficient: n-octanol/water 0,7 T = 20 °C, pH = 7 (EU Method A.8 - HPLC)
BCF 6,95 OECD 305

MIXTURE OF: 5-CHLORO-2-METHYL-2H- ISOTHIAZOL-3-ONE [N. CE 247-500-7]; 2-METHYL-2H-ISOTHIAZOL-3-ONE [No. CE 220-239-6] (3:1)
Partition coefficient: n-octanol/water 0,75 C(M)IT: 0.75 MIT: -0.71 (OECD 107)
BCF 54 Lepomis macrochirus (OECD 305 E)

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. Neat product residues should be considered special non-hazardous waste.
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

not applicable

SECTION 14. Transport information ... / >>

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

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

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:

Acute Tox. 2	Acute toxicity, category 2
Acute Tox. 3	Acute toxicity, category 3
Acute Tox. 4	Acute toxicity, category 4
Skin Corr. 1C	Skin corrosion, category 1C
Eye Dam. 1	Serious eye damage, category 1

SECTION 16. Other information ... / >>

Skin Irrit. 2	Skin irritation, category 2
Skin Sens. 1	Skin sensitization, category 1
Skin Sens. 1A	Skin sensitization, category 1A
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
H310	Fatal in contact with skin.
H330	Fatal if inhaled.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
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.
EUH071	Corrosive to the respiratory tract.
EUH210	Safety data sheet available on request.

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
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)

SECTION 16. Other information ... / >>

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

- 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.