

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

Code: **ICOBIT053**
Product name: **ICOPER STAR**

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

Intended use: **LIQUID WATERPROOFING MEMBRANE**

1.3. Details of the supplier of the safety data sheet

Name: **Icobit Italia srl**
Full address: **via Vittorio Veneto, 54b**
District and Country: **00187 Roma (RM) Italia**
Tel.: **0871.58701**
Fax: **0871.562191**

e-mail address of the competent person responsible for the Safety Data Sheet: **sds@icobititalia.com**

1.4. Emergency telephone number

For urgent inquiries refer to:

- CAVp Osp. Pediatrico Bambino Gesù Roma Piazza Sant'Onofrio, 4 Cap 00165 Tel +3906 68593726**
- Az. Osp. Univ. Foggia Foggia V.le Luigi Pinto, 1 Cap 71122 Tel +390881-732326**
- Az. Osp. "A. Cardarelli" Napoli Via A. Cardarelli, 9 Tel 80131 +39081-7472870**
- CAV Policlinico "Umberto I" Roma V.le del Policlinico, 155 Cap 00161 Tel +3906-49978000**
- CAV Policlinico A. Gemelli Roma Largo Agostino Gemelli, 8 Cap 00168 Tel +3906-3054343**
- Az. Osp. Careggi U.O. Tossicologia Medica Firenze Largo Brambilla, 3 Cap 50134 Tel +39055-7947819**
- CAV Centro Nazionale di Informazione Tossicologica Pavia Via Salvatore Maugeri, 10 Cap 27100 tel +390382-24444**
- Osp. Niguarda Ca "Granda Milano Piazza Ospedale Maggiore, 3 Cap 20162 Tel +3902-66101029**
- Azienda Ospedaliera Papa Giovanni XXII Bergamo Piazza OMS, 1 Cap 24127 Tel +39800883300**

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

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

SECTION 2. Hazards identification ... / >>

Hazard pictograms: --

Signal words: --

Hazard statements:

H412 Harmful to aquatic life with long lasting effects.
EUH208 Contains: REACTION MASS OF 5-CHLORO-2- METHYL-2H-ISOTHIAZOL-3-ONE AND 2-METHYL-2H-ISOTHIAZOL-3-ONE (3:1) 1,2-BENZISOTHIAZOLIN-3-ONE
May produce an allergic reaction.

Precautionary statements:

P501 Dispose of contents / container to in accordance with regulation
P273 Avoid release to the environment.

Contains: QUARTZ

VOC (Directive 2004/42/EC) :

One - pack performance coatings.

VOC given in g/litre of product in a ready-to-use condition : 0,86
Limit value: 140,00

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%.

The prepress contains crystalline silica (harmful by inhalation in the powder state - CAS: 14808-60-7, EC: 238-878-4 3.9 / 1 STOT RE 1 H372) but, after its mixing and cohesion in the liquid dispersion, does not involves risk of exposure as it is not breathable.

SECTION 3. Composition/information on ingredients

3.1. Substances

Information not relevant

3.2. Mixtures

Contains:

| Identification | x = Conc. % | Classification (EC) 1272/2008 (CLP) |
|------------------------|-----------------------|--|
| QUARTZ | | |
| INDEX | $2 \leq x < 2,5$ | STOT RE 1 H372 |
| EC | 238-878-4 | |
| CAS | 14808-60-7 | |
| PHOSPHORIC ACID | | |
| INDEX | $0,099 \leq x < 0,11$ | Met. Corr. 1 H290, Acute Tox. 4 H302, Skin Corr. 1B H314, Eye Dam. 1 H318, Classification note according to Annex VI to the CLP Regulation: B Met. Corr. 1 H290: $\geq 20\%$, Skin Corr. 1B H314: $\geq 25\%$, Skin Irrit. 2 H315: $\geq 10\%$ - $< 25\%$, Eye Dam. 1 H318: $\geq 25\%$, Eye Irrit. 2 H319: $\geq 10\%$ - $< 25\%$ LD50 Oral: 1530 mg/kg |
| EC | 231-633-2 | |
| CAS | 7664-38-2 | |
| ZINC OXIDE | | |
| INDEX | $0,099 \leq x < 0,11$ | Aquatic Acute 1 H400 M=1, Aquatic Chronic 1 H410 M=1 |
| EC | 215-222-5 | |
| CAS | 1314-13-2 | |
| ETHANOLAMINE | | |
| INDEX | $0,039 \leq x < 0,05$ | Acute Tox. 4 H302, Acute Tox. 4 H312, Acute Tox. 4 H332, Skin Corr. 1B H314, Eye Dam. 1 H318, STOT SE 3 H335, Aquatic Chronic 3 H412 STOT SE 3 H335: $\geq 5\%$ LD50 Oral: 1089 mg/kg, ATE Dermal: 1100 mg/kg, ATE Inhalation vapours: 11 mg/l |
| EC | 205-483-3 | |
| CAS | 141-43-5 | |

SECTION 3. Composition/information on ingredients ... / >>**1,2-BENZISOTHIAZOLIN-3-ONE**

INDEX 613-088-00-6 0,009 ≤ x < 0,02

Acute Tox. 2 H330, Acute Tox. 4 H302, Eye Dam. 1 H318, Skin Irrit. 2 H315, Skin Sens. 1A H317, Aquatic Acute 1 H400 M=1, Aquatic Chronic 1 H410 M=1

EC 220-120-9

CAS 2634-33-5

Skin Sens. 1A H317: ≥ 0,036%**LD50 Oral: 450 mg/kg, LC50 Inhalation mists/powders: 0,21 mg/l/4h****3-IODO-2-PROPYNYL BUTYLCARBAMATE**

INDEX 0,009 ≤ x < 0,02

Acute Tox. 3 H331, Acute Tox. 4 H302, STOT RE 1 H372, Eye Dam. 1 H318, Skin Sens. 1 H317, Aquatic Acute 1 H400 M=10, Aquatic Chronic 1 H410 M=1

EC 259-627-5

CAS 55406-53-6

LD50 Oral: 2000 mg/kg, LC50 Inhalation mists/powders: 0,67 mg/l/4h**TERBUTRINA**

INDEX 0,0025 ≤ x < 0,013

Acute Tox. 4 H302, Aquatic Acute 1 H400 M=100, Aquatic Chronic 1 H410 M=100

EC 212-950-5

CAS 886-50-0

LD50 Oral: 1000 mg/kg**REACTION MASS OF 5-CHLORO-2- METHYL-2H-ISOTHIAZOL-3-ONE AND 2-METHYL-2H-ISOTHIAZOL-3-ONE (3:1)**

INDEX 613-167-00-5 0 < 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, Classification note according to Annex VI to the CLP Regulation: B

EC

Skin Corr. 1C H314: ≥ 0,6%, Skin Irrit. 2 H315: ≥ 0,06% - < 0,6%, Skin Sens. 1A H317: ≥ 0,0015%, Eye Dam. 1 H318: ≥ 0,6%, Eye Irrit. 2 H319: ≥ 0,06% - < 0,6%

CAS 55965-84-9

ATE Oral: 100 mg/kg, LD50 Dermal: 87,12 mg/kg, LC50 Inhalation mists/powders: 0,171 mg/l/4h

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**

No effects requiring implementation of special first aid measures are expected. The following information represents practical indications of correct behaviour in the event of contact with a chemical product, even if not hazardous.

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 contaminated clothing. Wash immediately and thoroughly with running water (and soap if possible). Get medical advice.

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 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 symptoms occur, whether acute or delayed, consult a doctor.

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 | WirkungDosisNOAELMAK-und BAT-Werte-Liste 2024 Ständige Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe |
| ESP | España | Límites de exposición profesional para agentes químicos en España 2024 |
| 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 |
| PRT | Portugal | Decreto-Lei n.º 102/2024, de 4 de dezembro. Sumário: Transpõe para a ordem jurídica interna a Diretiva (UE) 2022/431, relativa à proteção dos trabalhadores contra riscos ligados à exposição a agentes cancerígenos ou mutagénicos e procede à quarta alteração |
| RUS | Россия | ПОСТАНОВЛЕНИЕ от 13 февраля 2018 г. N 25 ОБ УТВЕРЖДЕНИИ ГИГИЕНИЧЕСКИХ НОРМАТИВОВ ГН 2.2.5.3532-18 "ПРЕДЕЛЬНО ДОПУСТИМЫЕ КОНЦЕНТРАЦИИ (ПДК) ВРЕДНЫХ ВЕЩЕСТВ В ВОЗДУХЕ РАБОЧЕЙ ЗОНЫ" |
| GBR | United Kingdom | EH40/2005 Workplace exposure limits (Fourth Edition 2020) |
| EU | OEL EU | Directive (EU) 2022/431; Directive (EU) 2019/1831; Directive (EU) 2019/130; Directive (EU) 2019/983; Directive (EU) 2017/2398; Directive (EU) 2017/164; Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC; Directive 98/24/EC; Directive 91/322/EEC. |

TALC

Threshold Limit Value

| Type | Country | TWA/8h | | STEL/15min | | Remarks / Observations |
|------|---------|--------|-----|------------|-----|------------------------|
| | | mg/m3 | ppm | mg/m3 | ppm | |
| VLA | ESP | 2 | | | | RESP |
| WEL | GBR | 1 | | | | RESP |

Health - Derived no-effect level - DNEL / DMEL

| Route of exposure | Effects on consumers | | | | Effects on workers | | | |
|-------------------|----------------------|----------|---------|----------|--------------------|----------|---------|----------|
| | Acute | Acute | Chronic | Chronic | Acute | Acute | Chronic | Chronic |
| | local | systemic | local | systemic | local | systemic | local | systemic |
| Inhalation | | | | | 3,6 | 2,16 | 3,16 | 2,16 |
| | | | | | mg/m3 | mg/m3 | mg/m3 | mg/m3 |

TITANIUM DIOXIDE

Threshold Limit Value

| Type | Country | TWA/8h | | STEL/15min | | Remarks / Observations |
|------|---------|--------|-----|------------|-----|------------------------|
| | | mg/m3 | ppm | mg/m3 | ppm | |
| MAK | DEU | 0,3 | | 2,4 | | RESP Hinweis |
| VLA | ESP | 10 | | | | |
| VLEP | FRA | 10 | | | | |
| ПДК | RUS | 10 | | | | a, φ |
| WEL | GBR | 10 | | | | INHAL |
| WEL | GBR | 4 | | | | RESP |

QUARTZ

Threshold Limit Value

| Type | Country | TWA/8h | | STEL/15min | | Remarks / Observations |
|------|---------|--------|-----|------------|-----|------------------------|
| | | mg/m3 | ppm | mg/m3 | ppm | |
| VLA | ESP | 0,05 | | | | RESP |
| VLEP | FRA | 0,1 | | | | RESP |
| VLEP | ITA | 0,1 | | | | RESP |
| VLE | PRT | 0,05 | | | | RESP |
| OEL | EU | 0,1 | | | | RESP |

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

PHOSPHORIC ACID

Threshold Limit Value

| Type | Country | TWA/8h | | STEL/15min | | Remarks / Observations |
|------|---------|--------|-----|------------|-----|------------------------|
| | | mg/m3 | ppm | mg/m3 | ppm | |
| AGW | DEU | 2 | | 4 | | INHAL |
| MAK | DEU | 2 | | 4 | | INHAL |
| VLA | ESP | 1 | | 2 | | |
| VLEP | FRA | 1 | 0,2 | 2 | 0,5 | |
| VLEP | ITA | 1 | | 2 | | |
| VLE | PRT | 1 | | 2 | | |
| WEL | GBR | 1 | | 2 | | |
| OEL | EU | 1 | | 2 | | |

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 |
| ПДК | RUS | 0,5 | | 1,5 | | a |

ETHANOLAMINE

Threshold Limit Value

| Type | Country | TWA/8h | | STEL/15min | | Remarks / Observations |
|------|---------|--------|-----|------------|-----|------------------------|
| | | mg/m3 | ppm | mg/m3 | ppm | |
| AGW | DEU | 0,5 | 0,2 | 0,5 | 0,2 | SKIN 11 |
| MAK | DEU | 0,51 | 0,2 | 0,51 | 0,2 | |
| VLA | ESP | 2,5 | 1 | 7,5 | 3 | SKIN |
| VLEP | FRA | 2,5 | 1 | 7,6 | 3 | SKIN |
| VLEP | ITA | 2,5 | 1 | 7,6 | 3 | SKIN |
| VLE | PRT | 2,5 | 1 | 7,6 | 3 | SKIN |
| ПДК | RUS | | | 0,5 | | n + a |
| WEL | GBR | 2,5 | 1 | 7,6 | 3 | SKIN |
| OEL | EU | 2,5 | 1 | 7,6 | 3 | SKIN |

REACTION MASS OF 5-CHLORO-2- METHYL-2H-ISOTHIAZOL-3-ONE AND 2-METHYL-2H-ISOTHIAZOL-3-ONE

(3:1)

Threshold Limit Value

| Type | Country | TWA/8h | | STEL/15min | | Remarks / Observations |
|------|---------|--------|-----|------------|-----|------------------------|
| | | mg/m3 | ppm | mg/m3 | ppm | |
| MAK | DEU | 0,2 | | 0,4 | | INHAL |

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.

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 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

SECTION 8. Exposure controls/personal 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 | pasty liquid | |
| Colour | white | |
| Odour | characteristic | |
| Odour threshold | not applicable | |
| Melting point / freezing point | not available | |
| Initial boiling point | 100 °C | |
| Boiling range | 100-105 °C | |
| Flammability | not applicable | |
| Lower explosive limit | not applicable | |
| Upper explosive limit | not applicable | |
| Flash point | not applicable | |
| Auto-ignition temperature | not applicable | |
| Decomposition temperature | not available | |
| pH | 7,5-9,5 | |
| Kinematic viscosity | not available | |
| Dynamic viscosity | 6000-10000 Brookfield S05 30 rpm | |
| Solubility | miscible | |
| Partition coefficient: n-octanol/water | not applicable | |
| Vapour pressure | not available | |
| Density and/or relative density | 1,3 | |
| 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

| | | |
|------------------------------|----------------|---------|
| Total solids (130°C / 266°F) | 70,00 % | |
| VOC (Directive 2004/42/EC) : | 0,07 % - 0,86 | g/litre |
| VOC (volatile carbon) | 0,04 % - 0,57 | g/litre |
| Explosive properties | not applicable | |
| Oxidising properties | not applicable | |

SECTION 10. Stability and reactivity

10.1. Reactivity

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

PHOSPHORIC ACID

Decomposes at temperatures above 200°C/392°F.

SECTION 10. Stability and reactivity ... / >>

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.

PHOSPHORIC ACID

Risk of explosion on contact with: nitromethane. May react dangerously with: alkalis, sodium borohydride.

ETHANOLAMINE

May react dangerously with: acrylonitrile, chloroepoxypropane, chlorosulphuric acid, hydrogen chloride, iron-sulphur compounds, acetic acid, acetic anhydride, mesityl oxide, nitric acid, sulphuric acid, strong acids, vinyl acetate, cellulose nitrate.

10.4. Conditions to avoid

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

ETHANOLAMINE

Avoid exposure to: air, sources of heat.

10.5. Incompatible materials

PHOSPHORIC ACID

Incompatible with: metals, strong alkalis, aldehydes, organic sulphides, peroxides.

ETHANOLAMINE

Incompatible with: iron, strong acids, strong oxidants.

10.6. Hazardous decomposition products

PHOSPHORIC ACID

May develop: phosphoryl oxides.

ETHANOLAMINE

May develop: nitric oxide, carbon oxides.

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

3-IODO-2-PROPYNYL BUTYL CARBAMATE

specific organ toxicity sage STOT repeated exposure: category 1 - inhalation - larynx

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)

PHOSPHORIC ACID

LD50 (Dermal):

2740 mg/kg Rabbit

LD50 (Oral):

1530 mg/kg Rat

LC50 (Inhalation mists/powders):

> 0,85 mg/l/1h Rat

SECTION 11. Toxicological information ... / >>

ETHANOLAMINE

| | |
|----------------------------|-------------------|
| LD50 (Dermal): | 2504 mg/kg |
| LD50 (Oral): | 1089 mg/kg Rat |
| LC50 (Inhalation vapours): | > 1,3 mg/l/6h Rat |

1,2-BENZISOTHIAZOLIN-3-ONE

| | |
|----------------------------------|------------------|
| LD50 (Dermal): | > 2000 mg/kg Rat |
| LD50 (Oral): | 450 mg/kg Rat |
| LC50 (Inhalation mists/powders): | 0,21 mg/l/4h |

3-IODO-2-PROPYNYL BUTYLCARBAMATE

| | |
|----------------------------------|-----------------------|
| LD50 (Dermal): | > 2000 mg/kg coniglio |
| LD50 (Oral): | 2000 mg/kg ratto |
| LC50 (Inhalation mists/powders): | 0,67 mg/l/4h rat |

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| | |
|----------------------------------|-----------------------|
| LD50 (Dermal): | > 2000 mg/kg RABBIT |
| LD50 (Oral): | 1000 mg/kg RAT FEMALE |
| LC50 (Inhalation mists/powders): | > 8 g/mc RAT |

REACTION MASS OF 5-CHLORO-2- METHYL-2H-ISOTHIAZOL-3-ONE AND 2-METHYL-2H-ISOTHIAZOL-3-ONE (3:1)

| | |
|----------------------------------|--------------------|
| LD50 (Dermal): | 87,12 mg/kg Rabbit |
| LD50 (Oral): | 457 mg/kg Rat |
| LC50 (Inhalation mists/powders): | 0,171 mg/l/4h Rat |

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-2H-ISOTHIAZOL-3-ONE AND 2-METHYL-2H-ISOTHIAZOL-3-ONE (3:1)
1,2-BENZISOTHIAZOLIN-3-ONE

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

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 has negative effects on the aquatic environment.

12.1. Toxicity**ZINC OXIDE**

| | |
|---|--|
| LC50 - for Fish | 1,1 mg/l/96h <i>Oncorhynchus mykiss</i> |
| EC50 - for Crustacea | 1,7 mg/l/48h <i>Daphnia magna</i> |
| EC50 - for Algae / Aquatic Plants | 0,14 mg/l/72h <i>Pseudokirchneriella subcapitata</i> |
| Chronic NOEC for Fish | 0,53 mg/l |
| Chronic NOEC for Algae / Aquatic Plants | 0,024 mg/l |

ETHANOLAMINE

| | |
|----------------------------|---------------------------------|
| Chronic NOEC for Fish | 1,2 mg/l <i>Oryzias latipes</i> |
| Chronic NOEC for Crustacea | 0,85 mg/l <i>Daphnia magna</i> |

1,2-BENZISOTHIAZOLIN-3-ONE

| | |
|---|--|
| LC50 - for Fish | 2,15 mg/l/96h <i>Oncorhynchus mykiss</i> |
| EC50 - for Crustacea | 2,9 mg/l/48h <i>Daphnia magna</i> |
| EC50 - for Algae / Aquatic Plants | 0,11 mg/l/72h <i>Pseudokirchneriella subcapitata</i> |
| Chronic NOEC for Algae / Aquatic Plants | 0,0403 mg/l <i>Pseudokirchneriella subcapitata</i> |

3-iodo-2-propynyl butylcarbamate

| | |
|-----------------------------------|---|
| LC50 - for Fish | 0,067 mg/l/96h <i>Trota iridea</i> |
| EC50 - for Crustacea | 0,16 mg/l <i>dafnia grande</i> |
| EC50 - for Algae / Aquatic Plants | 0,022 mg/l <i>alghe - scenedesmus subspicatus</i> |
| Chronic NOEC for Fish | 0,049 mg/l <i>pesce</i> |

TERBUTRINA

| | |
|---|--|
| LC50 - for Fish | 1,9 mg/l/96h (<i>Oncorhynchus mykiss</i>) (OECD 203) |
| EC50 - for Crustacea | 6,4 mg/l/48h (<i>Daphnia magna</i>) (OECD 202) |
| EC50 - for Algae / Aquatic Plants | 0,0067 mg/l/168h (<i>Desmodesmus subspicatus</i>) (OECD 201) |
| Chronic NOEC for Fish | 0,073 mg/l (<i>pimephales promelas</i>) (OECD 210) |
| Chronic NOEC for Crustacea | 0,05 mg/l (<i>Daphnia magna</i>) (OECD 211) |
| Chronic NOEC for Algae / Aquatic Plants | 0,0005 mg/l (<i>Desmodesmus subspicatus</i>) (OECD 201) |

REACTION MASS OF 5-CHLORO-2- METHYL-2H-ISOTHIAZOL-3-ONE AND 2-METHYL-2H-ISOTHIAZOL-3-ONE (3:1)

| | |
|---|---|
| LC50 - for Fish | 0,19 mg/l/96h <i>Oncorhynchus mykiss</i> |
| EC50 - for Crustacea | 0,16 mg/l/48h <i>Daphnia magna</i> |
| EC50 - for Algae / Aquatic Plants | 0,0052 mg/l/72h <i>Skeletonema costatum</i> |
| Chronic NOEC for Fish | 0,02 mg/l <i>Danio rerio</i> |
| Chronic NOEC for Crustacea | 0,1 mg/l <i>Daphnia magna</i> |
| Chronic NOEC for Algae / Aquatic Plants | 0,00049 mg/l <i>Skeletonema costatum</i> |

12.2. Persistence and degradability**PHOSPHORIC ACID**

| | |
|--|---------------|
| Solubility in water | > 850000 mg/l |
| Degradability: information not available | |

ZINC OXIDE

| | |
|------------------------|----------|
| Solubility in water | 2,9 mg/l |
| NOT rapidly degradable | |

ETHANOLAMINE

| | |
|---------------------|-------------------|
| Solubility in water | 1000 - 10000 mg/l |
| Rapidly degradable | |

1,2-BENZISOTHIAZOLIN-3-ONE

| | |
|---------------------|-----------|
| Solubility in water | 1288 mg/l |
| Rapidly degradable | |

SECTION 12. Ecological information ... / >>

REACTION MASS OF 5-CHLORO-2- METHYL-2H-ISOTHIAZOL-3-ONE AND 2-METHYL-2H-ISOTHIAZOL-3-ONE (3:1)

Solubility in water > 10000 mg/l

NOT rapidly degradable

12.3. Bioaccumulative potential

ZINC OXIDE

BCF > 175

ETHANOLAMINE

Partition coefficient: n-octanol/water -2,3

1,2-BENZISOTHIAZOLIN-3-ONE

Partition coefficient: n-octanol/water 0,7

BCF 6,62

REACTION MASS OF 5-CHLORO-2- METHYL-2H-ISOTHIAZOL-3-ONE AND 2-METHYL-2H-ISOTHIAZOL-3-ONE (3:1)

Partition coefficient: n-octanol/water 0,75

BCF < 54

12.4. Mobility in soil

ETHANOLAMINE

Partition coefficient: soil/water -0,5646

1,2-BENZISOTHIAZOLIN-3-ONE

Partition coefficient: soil/water 0,97

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.

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

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

| | |
|----------------------------|----|
| <u>Product</u> | |
| <u>Point</u> | 3 |
| <u>Contained substance</u> | |
| <u>Point</u> | 75 |

Regulation (EU) 2019/1148 - on the marketing and use of explosives precursors
not applicableSubstances 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

VOC (Directive 2004/42/EC) :

One - pack performance coatings.

German regulation on the classification of substances hazardous to water (AwSV, vom 18. April 2017)

WGK 2: Hazard to waters

SECTION 15. Regulatory information ... / >>**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:

| | |
|--------------------------|--|
| Met. Corr. 1 | Substance or mixture corrosive to metals, category 1 |
| 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 |
| Skin Corr. 1B | Skin corrosion, category 1B |
| Skin Corr. 1C | Skin corrosion, category 1C |
| Skin Corr. 1 | Skin corrosion, category 1 |
| 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 |
| 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 3 | Hazardous to the aquatic environment, chronic toxicity, category 3 |
| H290 | May be corrosive to metals. |
| H310 | Fatal in contact with skin. |
| H330 | Fatal if inhaled. |
| H301 | Toxic if swallowed. |
| H331 | Toxic 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. |
| H314 | Causes severe skin burns and eye damage. |
| 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. |
| H400 | Very toxic to aquatic life. |
| H410 | Very toxic to aquatic life with long lasting effects. |
| H412 | Harmful to aquatic life with long lasting effects. |
| EUH071 | 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

SECTION 16. Other information ... / >>

- 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)
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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)
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21. Delegated Regulation (UE) 2021/849 (XVII Atp. CLP)
22. Delegated Regulation (UE) 2022/692 (XVIII Atp. CLP)
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- 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.

Changes to previous review:

The following sections were modified:

02 / 03 / 08 / 09 / 11 / 12 / 16.