**Safety Data Sheet**

Conforms to Regulation (EC) No. 1907/2006 (REACH), Article 31, Annex II, as amended by Commission Regulation (EU) 2020/878

**AQUASTOP FLEX (A)**

Date of first edition: 7/2/2021

Safety Data Sheet dated 17/06/2025

version 5

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

### 1.1. Product identifier

Mixture identification:

Trade name: AQUASTOP FLEX (A)

Trade code: S100K0161 41

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

Recommended use: Waterproofing product

Uses advised against: All uses other than recommended ones

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

Company: KERAKOLL S.p.A.

Via dell'Artigianato, 9

41049 Sassuolo (MODENA) - ITALY

Tel.+39 0536 816511 Fax. +39 0536816581

safety@kerakoll.com

### 1.4. Emergency telephone number

European emergency phone number 112

Ireland Emergency medical information: (seven days) contact National Poisons Information Centre, Beaumont Hospital, Dublin 9 DOV2NO, Ireland.

Members of the public Number (8 am-10 pm): +353 (0)1 809 2166

Healthcare professional telephone Number (24hrs): +353 (0)1 809 2566

Malta In case of emergency call: +356 2395 2000 (24h)

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

**Regulation (EC) n. 1272/2008 (CLP)**

| | |
|---|---|
| Skin Irrit. 2 | Causes skin irritation. |
| Eye Dam. 1 | Causes serious eye damage. |
| Skin Sens. 1B | May cause an allergic skin reaction. |
| STOT SE 3 | May cause respiratory irritation. |

Adverse physicochemical, human health and environmental effects:

No other hazards

### 2.2. Label elements

**Regulation (EC) No 1272/2008 (CLP):**

**Hazard pictograms and Signal Word**

Danger

**Hazard statements**

| | |
|---|---|
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H318 | Causes serious eye damage. |
| H335 | May cause respiratory irritation. |

**Precautionary statements**

| | |
|---|---|
| P102 | Keep out of reach of children. |

| | |
|---|---|
| P260 | Do not breathe dust/fume/gas/mist/vapours/spray. |
| P280 | Wear protective gloves and eye protection. |
| P302+P352 | IF ON SKIN: Wash with plenty of water. |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P501 | Dispose of contents/container in accordance with applicable regulations. |

**Contains**

Portland Cement (Cr VI < 0,0002%)

Flue Dust, Portland Cement

**Special provisions according to Annex XVII of REACH and subsequent amendments:**

None.

### 2.3. Other hazards

When mixtures containing cement react with water, for instance when making concrete or mortar, or when the cement becomes wet, a strong alkaline solution is produced (high pH caused by the formation of calcium, sodium and potassium hydroxides).

Cement and mixtures containing cement may irritate the eyes, the mucous system, the throat and the respiratory system and cause coughing. Frequent inhalation of cement dust or mixtures containing cement over a long period of time increases the risk of developing lung diseases.

In case of prolonged contact with the skin, both cement and mixtures containing cement, including pastes, may cause skin sensitisation due to the presence of trace amounts of chromium VI salts. Where necessary, such an effect can be minimized by incorporating a special reducing agent to maintain the water-soluble chromium VI content to concentration rates below 0.0002% (2 ppm) on the total dry weight of cement.

No PBT, vPvB or endocrine disruptor substances present in concentration >= 0.1%

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

N.A.

### 3.2. Mixtures

Mixture identification: AQUASTOP FLEX (A)

**Hazardous components within the meaning of the CLP regulation and related classification:**

| Qty | Name | Ident. Numb. | Classification | Registration Number |
|---|---|---|---|---|
| ≥20-<50 % | Portland Cement (Cr VI < 0,0002%) | CAS:65997-15-1<br>EC:266-043-4 | Skin Irrit. 2, H315; Eye Dam. 1, H318; Skin Sens. 1B, H317; STOT SE 3, H335 | |
| ≥1-<3 % | Flue Dust, Portland Cement | CAS:68475-76-3<br>EC:270-659-9 | Skin Irrit. 2, H315; Eye Dam. 1, H318; Skin Sens. 1, H317; STOT SE 3, H335 | 01-2119486767-17 |
| ≥0.5-<1 % | Quartz | CAS:14808-60-7<br>EC:238-878-4 | STOT RE 1, H372 | |

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

OBTAIN IMMEDIATE MEDICAL ATTENTION.

Remove contaminated clothing immediatley and dispose off safely.

After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an opthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Do not induce vomiting, get medical attention showing the SDS and label hazardous.

In case of Inhalation:

In case of inhalation, consult a doctor immediately and show him packing or label.

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

Eye irritation

Eye damages

Skin Irritation

Erythema

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

## SECTION 5: Firefighting measures

**5.1. Extinguishing media**

Suitable extinguishing media:

Water.

Carbon dioxide ($CO_2$).

Extinguishing media which must not be used for safety reasons:

None in particular.

**5.2. Special hazards arising from the substance or mixture**

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

**5.3. Advice for firefighters**

Use suitable breathing apparatus .

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

## SECTION 6: Accidental release measures

**6.1. Personal precautions, protective equipment and emergency procedures**

**For non emergency personnel:**

Wear personal protection equipment.

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

Provide adequate ventilation.

Use appropriate respiratory protection.

See protective measures under point 7 and 8.

**For emergency responders:**

Wear personal protection equipment.

**6.2. Environmental precautions**

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand

**6.3. Methods and material for containment and cleaning up**

Suitable material for taking up: absorbing material, organic, sand

Wash with plenty of water.

**6.4. Reference to other sections**

See also section 8 and 13

## SECTION 7: Handling and storage

**7.1. Precautions for safe handling**

Avoid contact with skin and eyes, inhalation of vapours and mists.

Use localized ventilation system.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

Contamined clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

**Advice on general occupational hygiene:**

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

The product must be stored in waterproof, dry, clean conditions and protected from contamination. Do not use aluminum containers due to incompatibility of the materials.

The product contains cement with an addition of a Chromium reducing agent (VI) and its effectiveness decreases with time. Consequently, packagings of the material indicate information about the production date, storing conditions and the appropriate storage period for the mantaining of the activity of the reducing agent and for mantaining the soluble Chromium (VI) amount under 2ppm over the total dry weight referred to cement (EN 196-10).

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

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

Recommendation(s)

None in particular

Industrial sector specific solutions:

None in particular

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

**Community Occupational Exposure Limits (OEL)**

| | OEL Type | Country | Occupational Exposure Limit |
|---|---|---|---|
| Quartz<br>CAS: 14808-60-7 | ACGIH | | Long Term: 0.025 mg/m3 (8h)<br>R, A2 - Pulm fibrosis, lung cancer |
| | NATIONAL | HUNGARY | Long Term: 0.1 mg/m3<br>Source: 5/2020. (II. 6.) ITM rendelet |
| | NATIONAL | IRELAND | Long Term: 0.1 mg/m3<br>Respirable fraction<br>Source: 2021 Code of Practice |
| | NATIONAL | ITALY | Long Term: 0.1 mg/m3<br>Polvere di silice cristallina respirabile (frazione inalabile). Rif:D.Lgs 81/2008<br>Source: D.lgs. 81/2008, Allegato XLIII |
| | NATIONAL | SPAIN | Long Term: 0.3 mg/m3<br>Respirable fraction<br>Source: LEP 2022 |
| | NATIONAL | BELGIUM | Long Term: 0.1 mg/m3<br>C<br>Source: Code du bien-être au travail, Livre VI, Titre 1er, Annexe VI.1-1 |
| | NATIONAL | DENMARK | Long Term: 0.3 mg/m3<br>alveolijae, liite 3<br>Source: BEK nr 2203 af 29/11/2021 |
| | NATIONAL | DENMARK | Long Term: 0.1 mg/m3<br>EK<br>Source: BEK nr 2203 af 29/11/2021 |
| | NATIONAL | ESTONIA | Long Term: 0.1 mg/m3<br>1, C<br>Source: Vabariigi Valitsuse, 20. märtsi 2001. a määrus nr 105 |
| | NATIONAL | FINLAND | Long Term: 0.05 mg/m3<br>alveolijae, liite 3<br>Source: HTP-ARVOT 2020 |
| | NATIONAL | FRANCE | Long Term: 0.1 mg/m3<br>La VLEP s'applique à la fraction alvéolaire. Forme de silice cristalline.<br>Source: INRS outil65, article R. 4412-149 du Code du travail |
| | NATIONAL | LITHUANIA | Long Term: 0.1 mg/m3<br>Žiūrėti 1 priedo 3 punktą.<br>Source: 2011 m. rugsėjo 1 d. Nr. V-824/A1-389 |
| | NATIONAL | NETHERLANDS | Long Term: 0.075 mg/m3<br>(2)<br>Source: Arbeidsomstandighedenregeling - Lijst B1 |
| | NATIONAL | NORWAY | Long Term: 0.3 mg/m3<br>K 7<br>Source: FOR-2021-06-28-2248 |
| | NATIONAL | NORWAY | Long Term: 0.05 mg/m3<br>K G 7 21<br>Source: FOR-2021-06-28-2248 |
| | NATIONAL | POLAND | Long Term: 0.1 mg/m3<br>6)<br>Source: Dz.U. 2018 poz. 1286 |
| | NATIONAL | SWEDEN | Long Term: 0.1 mg/m3<br>C, M, 3<br>Source: AFS 2021:3 |
| | SUVA | SWITZERLAND | Long Term: 0.15 mg/m3<br>TWA mg/m3: (a), C1A, SSC, P, Cancpulm Silicose / Lugenkrebs Silikose, HSE NIOSH OSHA<br>Source: suva.ch/valeurs-limites |

| | | | |
|---|---|---|---|
| Portland Cement (Cr VI < 0,0002%)<br>CAS: 65997-15-1 | ACGIH | | Long Term: 1 mg/m3 (8h)<br>E,R, A4 - Pulm func, resp symptoms, asthma |
| | NATIONAL | BELGIUM | Long Term: 1 mg/m3<br>Source: Code du bien-être au travail, Livre VI, Titre 1er, Annexe VI.1-1 |
| | NATIONAL | CROATIA | Long Term: 10 mg/m3<br>U<br>Source: NN 1/2021 |
| | NATIONAL | CROATIA | Long Term: 4 mg/m3<br>R<br>Source: NN 1/2021 |
| | NATIONAL | IRELAND | Long Term: 1 mg/m3<br>R<br>Source: 2021 Code of Practice |
| | NATIONAL | SPAIN | Long Term: 4 mg/m3<br>e, d<br>Source: LEP 2022 |
| | NATIONAL | AUSTRIA | Long Term: 5 mg/m3<br>MAK, E<br>Source: BGBl. II Nr. 156/2021 |
| | NATIONAL | FINLAND | Long Term: 5 mg/m3<br>hengittyvä pöly<br>Source: HTP-ARVOT 2020 |
| | NATIONAL | FINLAND | Long Term: 1 mg/m3<br>alveolijae<br>Source: HTP-ARVOT 2020 |
| | NATIONAL | HUNGARY | Long Term: 10 mg/m3<br>N<br>Source: 5/2020. (II. 6.) ITM rendelet |
| | NATIONAL | LATVIA | Long Term: 6 mg/m3<br>Source: KN325P1 |
| | NATIONAL | POLAND | Long Term: 6 mg/m3<br>4)<br>Source: Dz.U. 2018 poz. 1286 |
| | NATIONAL | POLAND | Long Term: 2 mg/m3<br>6), 7)<br>Source: Dz.U. 2018 poz. 1286 |
| | SUVA | SWITZERLAND | Long Term: 5 mg/m3<br>TWA mg/m3: (i), S, Poumons Asthme / Lunge Asthma<br>Source: suva.ch/valeurs-limites |
| | WEL-EH40 | UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND | Long Term: 10 mg/m3<br>Source: EH40/2005 Workplace exposure limits (Fourth Edition 2020) |
| | WEL-EH40 | UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND | Long Term: 4 mg/m3<br>Source: EH40/2005 Workplace exposure limits (Fourth Edition 2020) |
| Calcium carbonate<br>CAS: 471-34-1 | NATIONAL | HUNGARY | Long Term: 10 mg/m3<br>inhalable aerosol<br>Source: 5/2020. (II. 6.) ITM |
| | NATIONAL | IRELAND | Long Term: 10 mg/m3<br>Inhalable fraction<br>Source: 2021 Code of Practice |
| | NATIONAL | IRELAND | Long Term: 4 mg/m3<br>Respirable fraction<br>Source: 2021 Code of Practice |

| | | | |
|---|---|---|---|
| | NATIONAL | UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND | Long Term: 10 mg/m3<br>inhalable aerosol<br>Source: EH40/2005 Workplace exposure limits |
| | NATIONAL | UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND | Long Term: 4 mg/m3<br>respirable aerosol<br>Source: EH40/2005 Workplace exposure limits |
| | NATIONAL | CROATIA | Long Term: 10 mg/m3<br>U<br>Source: NN 1/2021 |
| | NATIONAL | CROATIA | Long Term: 4 mg/m3<br>R<br>Source: NN 1/2021 |
| | NATIONAL | FRANCE | Long Term: 10 mg/m3<br>Source: INRS outil65 |
| | NATIONAL | LATVIA | Long Term: 6 mg/m3<br>Source: KN325P1 |
| | NATIONAL | POLAND | Long Term: 10 mg/m3<br>4)<br>Source: Dz.U. 2018 poz. 1286 |
| | SUVA | SWITZERLAND | Long Term: 3 mg/m3<br>TWA mg/m3: (a), Formel / Formal, NIOSH<br>Source: suva.ch/valeurs-limites |
| Flue Dust, Portland Cement<br>CAS: 68475-76-3 | NATIONAL | AUSTRIA | Long Term: 5 mg/m3<br>MAK, E<br>Source: BGBl. II Nr. 156/2021 |
| Quartz<br>CAS: 14808-60-7 | EU | | Long Term: 0.1 mg/m3<br>Polvere di silice cristallina respirabile, frazione inalabile. (R), A2 - Pulm fibrosis, lung cancer. Directive 2017/2398 |
| | ACGIH | | Long Term: 0.025 mg/m3 (8h)<br>R, A2 - Pulm fibrosis, lung cancer |
| | NATIONAL | HUNGARY | Long Term: 0.1 mg/m3 (8h)<br>Respirable aerosol<br>Source: 5/2020. (II. 6.) ITM rendelet |
| | NATIONAL | IRELAND | Long Term: 0.1 mg/m3 (8h)<br>Respirable fraction<br>Source: 2021 Code of Practice |
| | NATIONAL | ITALY | Long Term: 0.1 mg/m3 (8h)<br>Polvere di silice cristallina respirabile (frazione inalabile). D.Lgs 81/2008<br>Source: D.lgs. 81/2008, Allegato XLIII |
| | NATIONAL | SPAIN | Long Term: 0.05 mg/m3 (8h)<br>Respirable fraction<br>Source: LEP 2022 |
| | NATIONAL | CROATIA | Long Term: 0.1 mg/m3<br>Source: NN 1/2021 |
| | NATIONAL | AUSTRIA | Long Term: 0.05 mg/m3<br>MAK, III C, A<br>Source: BGBl. II Nr. 156/2021 |
| | NATIONAL | BELGIUM | Long Term: 0.1 mg/m3<br>C<br>Source: Code du bien-être au travail, Livre VI, Titre 1er, Annexe VI.1-1 |
| | NATIONAL | DENMARK | Long Term: 0.3 mg/m3<br>Source: BEK nr 2203 af 29/11/2021 |
| | NATIONAL | DENMARK | Long Term: 0.1 mg/m3<br>EK<br>Source: BEK nr 2203 af 29/11/2021 |

| | | | |
|---|---|---|---|
| | NATIONAL | ESTONIA | Long Term: 0.1 mg/m3<br>1, C<br>Source: Vabariigi Valitsuse, 20. märtsi 2001. a määrus nr 105 |
| | NATIONAL | FINLAND | Long Term: 0.05 mg/m3<br>alveolijae, liite 3<br>Source: HTP-ARVOT 2020 |
| | NATIONAL | FRANCE | Long Term: 0.1 mg/m3<br>La VLEP s'applique à la fraction alvéolaire. Forme de silice cristalline.<br>Source: INRS outil65, article R. 4412-149 du Code du travail |
| | NATIONAL | LITHUANIA | Long Term: 0.1 mg/m3<br>Žiūrėti 1 priedo 3 punktą.<br>Source: 2011 m. rugsėjo 1 d. Nr. V-824/A1-389 |
| | NATIONAL | NETHERLANDS | Long Term: 0.075 mg/m3<br>(2)<br>Source: Arbeidsomstandighedenregeling - Lijst B1 |
| | NATIONAL | NORWAY | Long Term: 0.3 mg/m3<br>K 7<br>Source: FOR-2021-06-28-2248 |
| | NATIONAL | NORWAY | Long Term: 0.05 mg/m3<br>K G 7 21<br>Source: FOR-2021-06-28-2248 |
| | NATIONAL | POLAND | Long Term: 0.1 mg/m3<br>6)<br>Source: Dz.U. 2018 poz. 1286 |
| | NATIONAL | SWEDEN | Long Term: 0.1 mg/m3<br>C, M, 3<br>Source: AFS 2021:3 |
| | SUVA | SWITZERLAND | Long Term: 0.15 mg/m3<br>TWA mg/m3: (a), C1A, SSC, P, Cancpulm Silicose / Lugenkrebs Silikose, HSE NIOSH OSHA<br>Source: suva.ch/valeurs-limites |
| (+)-tartaric acid<br>CAS: 87-69-4 | NATIONAL | GERMANY | Long Term: 2 mg/m3<br>DFG, Y, E, 2 (I)<br>Source: TRGS 900 |
| | NATIONAL | SLOVENIA | Long Term: 2 mg/m3; Short Term: 4 mg/m3<br>Y, (I)<br>Source: UL št. 72, 11. 5. 2021 |
| | SUVA | SWITZERLAND | Long Term: 2 mg/m3; Short Term: 4 mg/m3<br>TWA mg/m3: (i), SSC, VR / AW<br>Source: suva.ch/valeurs-limites |
| Dimethyl siloxane<br>CAS: 63148-62-9 | NATIONAL | ROMANIA | Long Term: 200 mg/m3; Short Term: 300 mg/m3<br>P<br>Source: Republicarea 1 - nr. 743 din 29 iulie 2021 |
| silicon dioxide, chemically prepared<br>CAS: 7631-86-9 | NATIONAL | BELGIUM | Long Term: 10 mg/m3<br>Source: Code du bien-être au travail, Livre VI, Titre 1er, Annexe VI.1-1 |
| | NATIONAL | IRELAND | Long Term: 6 mg/m3<br>Inhalable fraction<br>Source: 2021 Code of Practice |
| | NATIONAL | IRELAND | Long Term: 2.4 mg/m3<br>Respirable fraction<br>Source: 2021 Code of Practice |
| | NATIONAL | UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND | Long Term: 6 mg/m3<br>Inhalable aerosol<br>Source: EH40/2005 Workplace exposure limits |
| | NATIONAL | UNITED KINGDOM OF GREAT BRITAIN AND | Long Term: 2.4 mg/m3<br>Respirable aerosol<br>Source: EH40/2005 Workplace exposure limits |

| | | | |
|---|---|---|---|
| | | NORTHERN IRELAND | |
| | NATIONAL | GERMANY | Long Term: 4 mg/m3<br>DFG, 2, Y, E<br>Source: TRGS 900 |
| | NATIONAL | SLOVENIA | Long Term: 4 mg/m3<br>Y, (I)<br>Source: UL št. 72, 11. 5. 2021 |
| | NATIONAL | AUSTRIA | MAK<br>Source: BGBl. II Nr. 156/2021 |
| | NATIONAL | ESTONIA | Long Term: 2 mg/m3<br>1<br>Source: Vabariigi Valitsuse, 20. märtsi 2001. a määrus nr 105 |
| | NATIONAL | LATVIA | Long Term: 1 mg/m3<br>Source: KN325P1 |
| | SUVA | SWITZERLAND | SSC, Fibpulm / Lungenfibrose, Des VMEs se trouvent sous les substances associées / MAK-Werte finden sich unter den zugeordneten Stoffen<br>Source: suva.ch/valeurs-limites |
| | SUVA | SWITZERLAND | Long Term: 4 mg/m3<br>TWA mg/m3: (i), SSC, Fibpulm / Lungenfibrose<br>Source: suva.ch/valeurs-limites |
| sodium chloride<br>CAS: 7647-14-5 | NATIONAL | LATVIA | Long Term: 5 mg/m3<br>Source: KN325P1 |
| | NATIONAL | LITHUANIA | Long Term: 5 mg/m3<br>Source: 2011 m. rugsėjo 1 d. Nr. V-824/A1-389 |
| Propane-1,2-diol<br>CAS: 57-55-6 | NATIONAL | CROATIA | Long Term: 474 mg/m3 - 150 ppm<br>Source: NN 1/2021 |
| | NATIONAL | CROATIA | Long Term: 10 mg/m3<br>Source: NN 1/2021 |
| | NATIONAL | IRELAND | Long Term: 470 mg/m3 - 150 ppm<br>Source: 2021 Code of Practice |
| | NATIONAL | IRELAND | Long Term: 10 mg/m3<br>Source: 2021 Code of Practice |
| | NATIONAL | LATVIA | Long Term: 7 mg/m3<br>Source: KN325P1 |
| | NATIONAL | LITHUANIA | Long Term: 7 mg/m3<br>Source: 2011 m. rugsėjo 1 d. Nr. V-824/A1-389 |
| | NATIONAL | NORWAY | Long Term: 79 mg/m3 - 25 ppm<br>Source: FOR-2021-06-28-2248 |
| | NATIONAL | POLAND | Long Term: 100 mg/m3<br>4)<br>Source: Dz.U. 2018 poz. 1286 |
| | WEL-EH40 | UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND | Long Term: 474 mg/m3 - 150 ppm<br>Source: EH40/2005 Workplace exposure limits (Fourth Edition 2020) |
| | WEL-EH40 | UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND | Long Term: 10 mg/m3<br>Source: EH40/2005 Workplace exposure limits (Fourth Edition 2020) |

**Predicted No Effect Concentration (PNEC) values**

| | |
|---|---|
| Flue Dust, Portland Cement<br>CAS: 68475-76-3 | Exposure Route: Fresh Water; PNEC Limit: 282 µg/l |
| | Exposure Route: Intermittent releases (fresh water); PNEC Limit: 282 µg/l |

Exposure Route: Marine water; PNEC Limit: 28 µg/l

Exposure Route: Microorganisms in sewage treatments; PNEC Limit: 6 mg/kg

Exposure Route: Marine water sediments; PNEC Limit: 88 µg/kg

Exposure Route: Freshwater sediments; PNEC Limit: 875 µg/kg

**Derived No Effect Level (DNEL) values**

| | |
|---|---|
| Flue Dust, Portland Cement<br>CAS: 68475-76-3 | Exposure Route: Human Inhalation; Exposure Frequency: Long Term, local effects<br>Worker Professional: 840 µg/m³; Consumer: 840 µg/m³ |
| | Exposure Route: Human Inhalation; Exposure Frequency: Short Term, local effects<br>Worker Professional: 4 mg/m³ |

**8.2. Exposure controls**

Eye protection:

Eye glasses with side protection.(EN166)

Protection for skin:

Chemical protection clothing. Safety shoes.

Protection for hands:

Protection for hands:

Suitable materials for safety gloves; EN 374:

Nitrile rubber - NBR: thickness ≥0,35mm; breakthrough time ≥480min.

Respiratory protection:

Particle filter P2 .

Thermal Hazards:

Not expected if used as intended

Environmental exposure controls:

Prevent the product from entering sewers or surface and underground water.

## SECTION 9: Physical and chemical properties

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

Physical state: Solid

Colour: Grey

Odour: N.A.

Odour threshold: N.A.

pH: =11.00

Kinematic viscosity: N.A.

Melting point/freezing point: N.A.

Boiling point or initial boiling point and boiling range: N.A.

Flash point: Not Applicable

Lower and upper explosion limit: N.A.

Relative vapour density: N.A.

Vapour pressure: N.A.

Density and/or relative density: 1.28 g/cm3

Solubility in water: Miscible

Solubility in oil: N.A.

Partition coefficient n-octanol/water (log value): N.A.

Auto-ignition temperature: N.A.

Decomposition temperature: N.A.

Flammability: N.A.

Volatile Organic compounds - VOCs = 0.00 % ; 0.02 g/l

**Particle characteristics:**

Particle size: N.A.

**9.2. Other information**

No other relevant information

## SECTION 10: Stability and reactivity

**10.1. Reactivity**

Stable under normal conditions

**10.2. Chemical stability**

The product is stable as long as it is properly stored (see Section 7).

Wet product is alkaline and incompatible with acids, with ammonium salts, with aluminium or other base metals. When in contact with hydrofluoric acid, mixtures contaning cement dissolve to produce corrosive silicon tetrafluoride gas. Mixtures containing cement react with

water to form silicates and calcium hydroxide. Silicates in cement react with powerful oxidizers such as fluorine, boron trifluoride, chlorine trifluoride, manganese trifluoride and oxygen difluoride.

Intact packaging and compliance with the appropriate storage conditions as indicated in Subsection 7.2 (adequate tightly closed and sealed containers, dry and cool place, no ventilation) are the essential conditions to keep the effectiveness of the reducing agent unaltered throughout the shelf life declared on bag.

**10.3. Possibility of hazardous reactions**

None.

**10.4. Conditions to avoid**

Stable under normal conditions.

**10.5. Incompatible materials**

Acids, ammonium salts, aluminium or other base metals. Uncontrolled use of aluminium dust in wet cement-containing products is to be avoided because it causes the production of hydrogen.

**10.6. Hazardous decomposition products**

None.

## SECTION 11: Toxicological information

**11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008**

**Toxicological Information of the Preparation**

| | |
|---|---|
| a) acute toxicity | Not classified |
| | Based on available data, the classification criteria are not met |
| b) skin corrosion/irritation | The product is classified: Skin Irrit. 2(H315) |
| c) serious eye damage/irritation | The product is classified: Eye Dam. 1(H318) |
| d) respiratory or skin sensitisation | The product is classified: Skin Sens. 1B(H317) |
| e) germ cell mutagenicity | Not classified |
| | Based on available data, the classification criteria are not met |
| f) carcinogenicity | Not classified |
| | Based on available data, the classification criteria are not met |
| g) reproductive toxicity | Not classified |
| | Based on available data, the classification criteria are not met |
| h) STOT-single exposure | The product is classified: STOT SE 3(H335) |
| i) STOT-repeated exposure | Not classified |
| | Based on available data, the classification criteria are not met |
| j) aspiration hazard | Not classified |
| | Based on available data, the classification criteria are not met |

**Toxicological information on main components of the mixture:**

| | | |
|---|---|---|
| Flue Dust, Portland Cement | a) acute toxicity | LD50 Oral Rat > 1848 mg/kg |
| | | LC50 Inhalation Dust Rat > 6.04 mg/l 4h |
| | | LD50 Skin Rat >= 2000 mg/kg 24h |
| | b) skin corrosion/irritation | Skin Irritant Negative |
| | c) serious eye damage/irritation | Eye Irritant Yes |
| | d) respiratory or skin sensitisation | Skin Sensitization Positive |
| | f) carcinogenicity | Genotoxicity Rat Negative |
| | g) reproductive toxicity | No Observed Adverse Effect Level Oral Rat = 16 mg/kg |
| Quartz | a) acute toxicity | LD50 Oral > 2000 mg/kg |

**11.2. Information on other hazards**

**Endocrine disrupting properties:**

No endocrine disruptor substances present in concentration >= 0.1%

## SECTION 12: Ecological information

**12.1. Toxicity**

Adopt good working practices, so that the product is not released into the environment.

Eco-Toxicological Information:

**List of Eco-Toxicological properties of the product**

Not classified for environmental hazards.

No data available for the product

**List of Eco-Toxicological properties of the components**

| Component | Ident. Numb. | Ecotox Data |
|---|---|---|
| Flue Dust, Portland Cement | CAS: 68475-76-3 - EINECS: 270-659-9 | a) Aquatic acute toxicity : NOEC Fish zebrafish = 11.1 mg/L 96h ECHA |
| | | a) Aquatic acute toxicity : LC50 Daphnia Daphnia magna = 100 mg/L 48h OECD 202 |
| | | b) Aquatic chronic toxicity : NOELR Daphnia Daphnia magna = 50 mg/L 48h OECD 211 |
| | | b) Aquatic chronic toxicity : EL10 Daphnia Daphnia magna = 68.2 mg/L 48h OECD 211 - 21 days |
| | | a) Aquatic acute toxicity : EC50 Algae Desmodesmus subspicatus = 28.2 mg/L 72h OECD 20 |
| | | a) Aquatic acute toxicity : EC50 Sludge activated sludge = 596 mg/L OECD Guideline No. 209 |
| | | b) Aquatic chronic toxicity : EC50 = 9931 mg/kg ,,PARCOM (1994): MAFF/ERT Harmonised Protocol: A sediment Bioassay using an Amphipod, Corophium sp. Draft 1994. - sediment |
| | | d) Terrestrial toxicity : EC50 Worm Eisenia fetida = 1000 mg/kg ,,OECD Guideline 207 (Earthworm, Acute Toxicity Tests) |

**12.2. Persistence and degradability**

N.A.

**12.3. Bioaccumulative potential**

N.A.

**12.4. Mobility in soil**

N.A.

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

No PBT or vPvB substances present in concentration >= 0.1%

**12.6. Endocrine disrupting properties**

No endocrine disruptor substances present in concentration >= 0.1%

**12.7. Other adverse effects**

N.A.

## SECTION 13: Disposal considerations

**13.1. Waste treatment methods**

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force. Disposal through discharge into wastewater is not permitted

The product disposed of as such, pursuant to Regulation (EU) 1357/2014, must be classified as hazardous waste

A waste code according to the European List of Wastes (LoW) cannot be specified, due to dependence on the usage. Contact an authorized waste disposal service.

**Properties of waste which render it hazardous (Annex III, Directive 2008/98/EC):**

N.A.

## SECTION 14: Transport information

Not classified as dangerous in the meaning of transport regulations.

**14.1. UN number or ID number**

N/A

**14.2. UN proper shipping name**

ADR-Shipping Name: N/A

IATA-Shipping Name: N/A

IMDG-Shipping Name: N/A

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

ADR-Class: N/A

IATA-Class: N/A

IMDG-Class: N/A

**14.4. Packing group**

ADR-Packing Group: N/A

IATA-Packing group: N/A

IMDG-Packing group: N/A

**14.5. Environmental hazards**

Marine pollutant: No

Environmental Pollutant: No

IMDG-EMS: N/A

**14.6. Special precautions for user**

Road and Rail (ADR-RID):

ADR-Label: N/A

ADR - Hazard identification number: N/A

ADR-Special Provisions: N/A

ADR-Transport category (Tunnel restriction code): N/A

ADR Limited Quantities: N/A

ADR Excepted Quantities: N/A

Air (IATA):

IATA-Passenger Aircraft: N/A

IATA-Cargo Aircraft: N/A

IATA-Label: N/A

IATA-Subsidiary hazards: N/A

IATA-Erg: N/A

IATA-Special Provisions: N/A

Sea (IMDG):

IMDG-Stowage and handling: N/A

IMDG-Segregation: N/A

IMDG-Subsidiary hazards: N/A

IMDG-Special Provisions: N/A

**14.7. Maritime transport in bulk according to IMO instruments**

N.A.

---

## SECTION 15: Regulatory information

**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

EN 196-10 – "Methods of Testing Cement - Part 10: Determination of the water-soluble chromium (VI) content of cement"

According to Annex XVII, Point 47, under Regulation (EC) No. 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) as amended by Regulation No. 552/2009, cement and mixtures containing cement shall not be placed on the market or used if they contain, after mixing with water, more than 0.0002% (2 ppm) of soluble chromium (VI) of the total dry weight of the cement. Compliance with this threshold limit is ensured through the introduction of a reducing agent into the preparation, the effectiveness of which is guaranteed for a certain period of time (shelf life), and the maintenance of the appropriate storage conditions (see Subsection 7.2 and Section 10).

Cement is a mixture and, as such, is not subject to REACH registration, which is mandatory for substances. Cement clinker is a substance, but it is exempt from registration pursuant to article 2.7 (b) and Annex V.10 of REACH.

Dir. 98/24/EC (Risks related to chemical agents at work)

Dir. 2000/39/EC (Occupational exposure limit values)

Regulation (EC) n. 1907/2006 (REACH)

Regulation (EC) n. 1272/2008 (CLP)

Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013

Regulation (EU) n. 286/2011 (ATP 2 CLP)

Regulation (EU) n. 618/2012 (ATP 3 CLP)

Regulation (EU) n. 487/2013 (ATP 4 CLP)

Regulation (EU) n. 944/2013 (ATP 5 CLP)

Regulation (EU) n. 605/2014 (ATP 6 CLP)

Regulation (EU) n. 2015/1221 (ATP 7 CLP)

Regulation (EU) n. 2016/918 (ATP 8 CLP)

Regulation (EU) n. 2016/1179 (ATP 9 CLP)

Regulation (EU) n. 2017/776 (ATP 10 CLP)

Regulation (EU) n. 2018/669 (ATP 11 CLP)

Regulation (EU) n. 2018/1480 (ATP 13 CLP)

Regulation (EU) n. 2019/521 (ATP 12 CLP)

Regulation (EU) n. 2020/217 (ATP 14 CLP)
Regulation (EU) n. 2020/1182 (ATP 15 CLP)
Regulation (EU) n. 2021/643 (ATP 16 CLP)
Regulation (EU) n. 2021/849 (ATP 17 CLP)
Regulation (EU) n. 2022/692 (ATP 18 CLP)
Regulation (EU) n. 2023/707
Regulation (EU) n. 2023/1434 (ATP 19 CLP)
Regulation (EU) n. 2023/1435 (ATP 20 CLP)
Regulation (EU) n. 2024/197 (ATP 21 CLP)
Regulation (EU) n. 2020/878
Regulation (EC) nr 648/2004 (Detergents).

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product: None.

Restrictions related to the substances contained: 75

Provisions related to directive EU 2012/18 (Seveso III):

None

**Explosives precursors – Regulation 2019/1148**

No substances listed

**Regulation (EU) No 649/2012 (PIC regulation)**

No substances listed

**German Water Hazard Class.**

Class 1: slightly hazardous for water.

**German Lagerklasse according to TRGS 510:**

LGK 11

SVHC Substances:

No SVHC substances present in concentration >= 0.1%

**15.2. Chemical safety assessment**

No Chemical Safety Assessment has been carried out for the mixture.

**Substances for which a Chemical Safety Assessment has been carried out:**

Flue Dust, Portland Cement

## SECTION 16: Other information

| Code | Description |
|---|---|
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H318 | Causes serious eye damage. |
| H335 | May cause respiratory irritation. |
| H372 | Causes damage to organs through prolonged or repeated exposure. |

| Code | Hazard class and hazard category | Description |
|---|---|---|
| 3.2/2 | Skin Irrit. 2 | Skin irritation, Category 2 |
| 3.3/1 | Eye Dam. 1 | Serious eye damage, Category 1 |
| 3.4.2/1 | Skin Sens. 1 | Skin Sensitisation, Category 1 |
| 3.4.2/1B | Skin Sens. 1B | Skin Sensitisation, Category 1B |
| 3.8/3 | STOT SE 3 | Specific target organ toxicity — single exposure, Category 3 |
| 3.9/1 | STOT RE 1 | Specific target organ toxicity — repeated exposure, Category 1 |

**Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:**

| Classification according to Regulation (EC) Nr. 1272/2008 | Classification procedure |
|---|---|
| Skin Irrit. 2, H315 | Calculation method |
| Eye Dam. 1, H318 | Calculation method |
| Skin Sens. 1B, H317 | Calculation method |
| STOT SE 3, H335 | Calculation method |

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

Legend to abbreviations and acronyms used in the safety data sheet:

ACGIH: American Conference of Governmental Industrial Hygienists

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

AND: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

ATE: Acute Toxicity Estimate

ATEmix: Acute toxicity Estimate (Mixtures)

BCF: Biological Concentration Factor

BEI: Biological Exposure Index

BOD: Biochemical Oxygen Demand

CAS: Chemical Abstracts Service (division of the American Chemical Society).

CAV: Poison Center

CE: European Community

CLP: Classification, Labeling, Packaging.

CMR: Carcinogenic, Mutagenic and Reprotoxic

COD: Chemical Oxygen Demand

COV: Volatile Organic Compound

CSA: Chemical Safety Assessment

CSR: Chemical Safety Report

DMEL: Derived Minimal Effect Level

DNEL: Derived No Effect Level.

DPD: Dangerous Preparations Directive

DSD: Dangerous Substances Directive

EC50: Half Maximal Effective Concentration

ECHA: European Chemicals Agency

EINECS: European Inventory of Existing Commercial Chemical Substances.

ES: Exposure Scenario

GefStoffVO: Ordinance on Hazardous Substances, Germany.

GHS: Globally Harmonized System of Classification and Labeling of Chemicals.

IARC: International Agency for Research on Cancer

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

IC50: half maximal inhibitory concentration

ICAO: International Civil Aviation Organization.

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).

IMDG: International Maritime Code for Dangerous Goods.

INCI: International Nomenclature of Cosmetic Ingredients.

IRCCS: Scientific Institute for Research, Hospitalization and Health Care

KAFH: Keep Away From Heat

KSt: Explosion coefficient.

LC50: Lethal concentration, for 50 percent of test population.

LD50: Lethal dose, for 50 percent of test population.

LDLo: Leathal Dose Low

N.A.: Not Applicable

N/A: Not Applicable

N/D: Not defined/ Not available

NA: Not available

NIOSH: National Institute for Occupational Safety and Health

NOAEL: No Observed Adverse Effect Level

OSHA: Occupational Safety and Health Administration

PBT: Persistent, Bioaccumulative and Toxic

PGK: Packaging Instruction

PNEC: Predicted No Effect Concentration.

PSG: Passengers

RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.

STEL: Short Term Exposure limit.
STOT: Specific Target Organ Toxicity.
TLV: Threshold Limiting Value.
TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).
vPvB: Very Persistent, Very Bioaccumulative.
WGK: German Water Hazard Class.

**Paragraphs modified from the previous revision:**

- SECTION 1: Identification of the substance/mixture and of the company/undertaking
- SECTION 2: Hazards identification
- SECTION 3: Composition/information on ingredients
- SECTION 7: Handling and storage
- SECTION 8: Exposure controls/personal protection
- SECTION 9: Physical and chemical properties
- SECTION 11: Toxicological information
- SECTION 12: Ecological information
- SECTION 13: Disposal considerations
- SECTION 14: Transport information
- SECTION 15: Regulatory information
- SECTION 16: Other information

# Exposure Scenario

## Flue dust, portland cement

## Exposure Scenario, 08/06/2021

| Substance identity | |
|---|---|
| | Flue dust, portland cement |
| **CAS No.** | 68475-76-3 |
| **EINECS No.** | 270-659-9 |
| **Registration number** | 01-2119486767-17 |

## Table of contents

# 1. ES 1 Widespread use by professional workers; Various products (PC9b, PC9a, PC1, PC15)

## 1.1 TITLE SECTION

| | |
|---|---|
| **Exposure Scenario name** | Road and construction applications - Professional use of floor care products - Tackifier |
| **Date - Version** | 25/03/2021 - 1.0 |
| **Life Cycle Stage** | Widespread use by professional workers |
| **Main user group** | Professional uses |
| **Sector(s) of use** | Professional uses (SU22) |
| **Product Categories** | Fillers, putties, plasters, modelling clay (PC9b) - Coatings and paints, thinners, paint removers (PC9a) - Adhesives, sealants (PC1) - Non-metal surface treatment products (PC15) |
| **Article Category(ies)** | Stone, plaster, cement, glass and ceramic articles: Large surface area articles (AC4a) |

### Environment Contributing Scenario

| | |
|---|---|
| **CS1 Low environmental release** | ERC2 |

### Worker Contributing Scenario

| | |
|---|---|
| **CS2 Mixing operations - Transfer from/pouring from containers - Hand application - finger paints, pastels, adhesives - Filling of equipment from drums or containers - Manual - Equipment cleaning and maintenance - Roller, spreader, flow application - Equipment maintenance** | PROC5 - PROC8a - PROC8b - PROC10 - PROC11 - PROC19 - PROC26 - PROC28 |

## 1.2 Conditions of use affecting exposure

### 1.2. CS1: Environment Contributing Scenario: Low environmental release (ERC2)

| | |
|---|---|
| **Environmental release categories** | Formulation into mixture (ERC2) |

#### *Product (article) characteristics*

**Physical form of product:**

Solid, very high dustiness

**Vapour pressure:**

< 1E-05 Pa

### 1.2. CS2: Worker Contributing Scenario: Mixing operations - Transfer from/pouring from containers - Hand application - finger paints, pastels, adhesives - Filling of equipment from drums or containers - Manual - Equipment cleaning and maintenance - Roller, spreader, flow application - Equipment maintenance (PROC5, PROC8a, PROC8b, PROC10, PROC11, PROC19, PROC26, PROC28)

| | |
|---|---|
| **Process Categories** | Mixing or blending in batch processes - Transfer of substance or mixture (charging and discharging) at non-dedicated facilities - Transfer of substance or mixture (charging and discharging) at dedicated facilities - Roller application or brushing - Non industrial spraying - Manual activities involving hand contact - Handling of solid inorganic substances at ambient temperature - Manual maintenance (cleaning and repair) of machinery (PROC5, PROC8a, PROC8b, PROC10, PROC11, PROC19, PROC26, PROC28) |

#### *Product (article) characteristics*

**Physical form of product:**

Solid, very high dustiness
Solid in solution
pasty

**Concentration of substance in product:**

Covers percentage substance in the product up to 5 %.

#### *Amount used, frequency and duration of use/exposure*

**Duration:**

Exposure duration <= 480 min

**Frequency:**

Use frequency = 8 h/event

### *Technical and organisational conditions and measures*

**Technical and organisational measures**

Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed.
Other skin protection measures such as impervious suits and face shields may be required during high dispersion activities which are likely to lead to substantial aerosol release, e.g. spraying.
Ensure operatives are trained to minimise exposures.
For measures to control risks from physicochemical properties, refer to main body of the SDS, section 7 and/or 8.
Do not ingest.

### *Conditions and measures related to personal protection, hygiene and health evaluation*

**Personal protection**

Wear suitable gloves tested to EN374.
Use eye protection according to EN 166.
Wear a respirator conforming to EN140.

### *Other conditions affecting worker exposure*

Covers indoor and outdoor use
Professional use
**Temperature:** Covers use at ambient temperatures. 23°C
**Body parts exposed:**
Assumes that potential dermal contact is limited to hands and forearms.

### *Additional good practice advice. Obligations according to Article 37(4) of REACH do not apply.*

**Additional Good Practice Advice:**

Ensure regular inspection, cleaning and maintenance of equipment and machines. Ensure procedures and training for emergency decontamination and disposal are in place. Ensure control measures are regularly inspected and maintained.

## 1.3 Exposure estimation and reference to its source

**1.3. CS2: Worker Contributing Scenario: Mixing operations - Transfer from/pouring from containers - Hand application - finger paints, pastels, adhesives - Filling of equipment from drums or containers - Manual - Equipment cleaning and maintenance - Roller, spreader, flow application - Equipment maintenance (PROC5, PROC8a, PROC8b, PROC10, PROC11, PROC19, PROC26, PROC28)**

| Exposure route, Health effect, Exposure indicator | Exposure level | Calculation method | Risk Characterization Ratio (RCR) |
|---|---|---|---|
| inhalative, local, short-term | < 1 mg/m³ | MEASE | <= 0.83 |

**Additional information on exposure estimation:**

Available hazard data do not enable the derivation of a DNEL for dermal irritant effects.

## 1.4 Guidance to DU to evaluate whether he works inside the boundaries set by the ES

**Guidance to check compliance with the exposure scenario:**

Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

**Safety Data Sheet**

Conforms to Regulation (EC) No. 1907/2006 (REACH), Article 31, Annex II, as amended by Commission Regulation (EU) 2020/878

**AQUASTOP FLEX (B)**

Date of first edition: 7/2/2021

Safety Data Sheet dated 17/06/2025

version 4

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

### 1.1. Product identifier

Mixture identification:

Trade name: AQUASTOP FLEX (B)

Trade code: S100B0037 32

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

Recommended use: Waterproofing product

Uses advised against: All uses other than recommended ones

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

Company: KERAKOLL S.p.A.

Via dell'Artigianato, 9

41049 Sassuolo (MODENA) - ITALY

Tel.+39 0536 816511 Fax. +39 0536816581

safety@kerakoll.com

### 1.4. Emergency telephone number

European emergency phone number 112

Ireland Emergency medical information: (seven days) contact National Poisons Information Centre, Beaumont Hospital, Dublin 9 DOV2NO, Ireland.

Members of the public Number (8 am-10 pm): +353 (0)1 809 2166

Healthcare professional telephone Number (24hrs): +353 (0)1 809 2566

Malta In case of emergency call: +356 2395 2000 (24h)

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

**Regulation (EC) n. 1272/2008 (CLP)**

The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).

Adverse physicochemical, human health and environmental effects:

No other hazards

### 2.2. Label elements

The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).

**Special Provisions:**

EUH208 Contains 1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one. May produce an allergic reaction.

EUH208 Contains reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1). May produce an allergic reaction.

EUH210 Safety data sheet available on request.

**Special provisions according to Annex XVII of REACH and subsequent amendments:**

None.

### 2.3. Other hazards

No PBT, vPvB or endocrine disruptor substances present in concentration >= 0.1%

Other Hazards: The product is identified as an article treated pursuant to art. 58 of Regulation (EU) no. 528/2012 and subsequent amendments. Possible skin exposure must be avoided. Protective gloves and work clothes are required. Avoid releasing product into the environment. When washing work equipment, water must not be dispersed in the soil or on surface water; Contains biocidal product: C(M)IT/MIT (3:1)

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

N.A.

### 3.2. Mixtures

Mixture identification: AQUASTOP FLEX (B)

**Hazardous components within the meaning of the CLP regulation and related classification:**

| Qty | Name | Ident. Numb. | Classification | Registration Number |
|---|---|---|---|---|
| <0.036 % | 1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one | CAS:2634-33-5<br>EC:220-120-9<br>Index:613-088-00-6 | Acute Tox. 2, H330; Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Dam. 1, H318; Skin Sens. 1A, H317; Aquatic Acute 1, H400; Aquatic Chronic 1, H410, M-Chronic:1, M-Acute:1<br><br>Specific Concentration Limits:<br>C ≥ 0.036%: Skin Sens. 1A H317 | 01-2120761540-60 |
| <0.0015 % | reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) | CAS:55965-84-9<br>Index:613-167-00-5 | Acute Tox. 2, H330; Acute Tox. 2, H310; Acute Tox. 3, H301; Skin Corr. 1C, H314; Eye Dam. 1, H318; Skin Sens. 1A, H317; Aquatic Acute 1, H400; Aquatic Chronic 1, H410, M-Chronic:100, M-Acute:100, EUH071<br><br>Specific Concentration Limits:<br>C ≥ 0.6%: Skin Corr. 1C H314<br>0.06% ≤ C < 0.6%: Skin Irrit. 2 H315<br>C ≥ 0.6%: Eye Dam. 1 H318<br>0.06% ≤ C < 0.6%: Eye Irrit. 2 H319<br>C ≥ 0.0015%: Skin Sens. 1A H317 | |

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

In case of skin contact:

Wash with plenty of water and soap.

In case of eyes contact:

Wash immediately with water.

In case of Ingestion:

Do not induce vomiting, get medical attention showing the SDS and label hazardous.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

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

N.A.

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

N.A.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media:

Water.

Carbon dioxide ($CO_2$).

Extinguishing media which must not be used for safety reasons:

None in particular.

### 5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

### 5.3. Advice for firefighters

Use suitable breathing apparatus .

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

**For non emergency personnel:**

Wear personal protection equipment.

Remove persons to safety.

See protective measures under point 7 and 8.

**For emergency responders:**

Wear personal protection equipment.

**6.2. Environmental precautions**

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand

**6.3. Methods and material for containment and cleaning up**

Suitable material for taking up: absorbing material, organic, sand

Wash with plenty of water.

**6.4. Reference to other sections**

See also section 8 and 13

## SECTION 7: Handling and storage

**7.1. Precautions for safe handling**

Avoid contact with skin and eyes, inhalation of vapours and mists.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

**Advice on general occupational hygiene:**

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

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

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

Recommendation(s)

None in particular

Industrial sector specific solutions:

None in particular

## SECTION 8: Exposure controls/personal protection

**8.1. Control parameters**

**Community Occupational Exposure Limits (OEL)**

| | OEL Type | Country | Occupational Exposure Limit |
|---|---|---|---|
| reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)<br>CAS: 55965-84-9 | NATIONAL | GERMANY | Long Term: 0.2 mg/m3; Short Term: 0.4 mg/m3<br>DFG; Long term and short term: inhalable fraction<br>Source: TRGS900 |
| | NATIONAL | AUSTRIA | Long Term: 0.05 mg/m3<br>MAK, Sh<br>Source: GKV, BGBl. II Nr. 156/2021 |
| | SUVA | SWITZERLAND | Long Term: 0.2 mg/m3; Short Term: 0.4 mg/m3<br>TWA mg/m3: (i), S, SSC, VRS Peau Yeux / OAW Haut Auge<br>Source: suva.ch/valeurs-limites |
| 2-Aminoethanol; ethanolamine<br>CAS: 141-43-5 | ACGIH | | Long Term: 3 ppm (8h); Short Term: 6 ppm<br>Eye and skin irr |
| | NATIONAL | AUSTRIA | Long Term: 2.5 mg/m3 - 1 ppm; Short Term: 7.6 mg/m3 - 3 ppm<br>15(Miw), 4x, MAK, Sh<br>Source: GKV, BGBl. II Nr. 156/2021 |
| | NATIONAL | BULGARIA | Long Term: 2.5 mg/m3 - 1 ppm; Short Term: 7.6 mg/m3 - 3 ppm<br>Кожа<br>Source: НАРЕДБА № 13 ОТ 30 ДЕКЕМВРИ 2003 Г. |
| | NATIONAL | CZECHIA | Long Term: 2.5 mg/m3; Short Term: Ceiling - 7.5 mg/m3<br>I<br>Source: Nařízení vlády č. 361-2007 Sb |

| | | |
|---|---|---|
| NATIONAL | DENMARK | Long Term: 2.5 mg/m3 - 1 ppm<br>EH<br>Source: BEK nr 2203 af 29/11/2021 |
| NATIONAL | ESTONIA | Long Term: 2.5 mg/m3 - 1 ppm; Short Term: 7.6 mg/m3 - 3 ppm<br>A<br>Source: Vabariigi Valitsuse, 20. märtsi 2001. a määrus nr 105 |
| NATIONAL | FINLAND | Long Term: 2.5 mg/m3 - 1 ppm; Short Term: 7.6 mg/m3 - 3 ppm<br>iho<br>Source: HTP-ARVOT 2020 |
| NATIONAL | FRANCE | Long Term: 2.5 mg/m3 - 1 ppm; Short Term: 7.6 mg/m3 - 3 ppm<br>Risque de pénétration percutanée<br>Source: INRS outil65, article R. 4412-149 du Code du travail |
| NATIONAL | HUNGARY | Long Term: 2.5 mg/m3; Short Term: 7.6 mg/m3<br>b, EU2, T<br>Source: 5/2020. (II. 6.) ITM rendelet |
| NATIONAL | LITHUANIA | Long Term: 8 mg/m3 - 3 ppm; Short Term: 15 mg/m3 - 6 ppm<br>O<br>Source: 2011 m. rugsėjo 1 d. Nr. V-824/A1-389 |
| NATIONAL | NETHERLANDS | Long Term: 2.5 mg/m3; Short Term: 7.6 mg/m3<br>H<br>Source: Arbeidsomstandighedenregeling - Lijst A |
| NATIONAL | NORWAY | Long Term: 2.5 mg/m3 - 1 ppm<br>H E<br>Source: FOR-2021-06-28-2248 |
| NATIONAL | POLAND | Long Term: 2.5 mg/m3; Short Term: 7.5 mg/m3<br>skóra<br>Source: Dz.U. 2018 poz. 1286 |
| NATIONAL | SLOVAKIA | Long Term: 2.5 mg/m3 - 1 ppm; Short Term: 7.6 mg/m3 - 3 ppm<br>K<br>Source: 355 NARIADENIE VLÁDY z 10. mája 2006 |
| NATIONAL | SWEDEN | Long Term: 2.5 mg/m3 - 1 ppm; Short Term: 7.5 mg/m3 - 3 ppm<br>H<br>Source: AFS 2021:3 |
| SUVA | SWITZERLAND | Long Term: 5 mg/m3 - 2 ppm; Short Term: 10 mg/m3 - 4 ppm<br>S, Peau Fatigue Yeux / Haut Fatigue Auge, NIOSH, La substance peut être présente sous forme de vapeur et d'aérosol en même temps / Der Stoff kann gleichzeitig als Dampf und Aerosol vorliegen<br>Source: suva.ch/valeurs-limites |
| WEL-EH40 | UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND | Long Term: 2.5 mg/m3 - 1 ppm; Short Term: 7.6 mg/m3 - 3 ppm<br>Sk<br>Source: EH40/2005 Workplace exposure limits (Fourth Edition 2020) |
| NATIONAL | BELGIUM | Long Term: 2.5 mg/m3 - 1 ppm; Short Term: 7.6 mg/m3 - 3 ppm<br>D<br>Source: Code du bien-être au travail, Livre VI, Titre 1er, Annexe VI.1-1 |
| NATIONAL | CROATIA | Long Term: 2.5 mg/m3 - 1 ppm; Short Term: 7.6 mg/m3 - 3 ppm<br>koža<br>Source: 2006/15/EZ |
| NATIONAL | CYPRUS | Long Term: 2.5 mg/m3 - 1 ppm; Short Term: 7.6 mg/m3 - 3 ppm<br>δέρμα<br>Source: Οι περί Ασφάλειας και Υγείας στην Εργασία (Χημικοί Παράγοντες) Κανονισμοί του 2001 έως 2021 |
| NATIONAL | GERMANY | Long Term: 0.5 mg/m3 - 0.2 ppm<br>DFG, EU, Y, Sh, H, 11, 1(I)<br>Source: TRGS 900 |
| NATIONAL | GREECE | Long Term: 2.5 mg/m3 - 1 ppm; Short Term: 7.6 mg/m3 - 3 ppm<br>Δ<br>Source: ΦΕΚ 202/Α` 23.8.2007 |
| NATIONAL | IRELAND | Long Term: 2.5 mg/m3 - 1 ppm; Short Term: 7.6 mg/m3 - 3 ppm<br>Sk, IOELV |

| | | |
|---|---|---|
| | | Source: 2021 Code of Practice |
| NATIONAL | ITALY | Long Term: 2.5 mg/m3 - 1 ppm; Short Term: 7.6 mg/m3 - 3 ppm<br>Cute<br>Source: D.lgs. 81/2008, Allegato XXXVIII |
| NATIONAL | LATVIA | Long Term: 0.5 mg/m3 - 0.2 ppm; Short Term: 7.6 mg/m3 - 3 ppm<br>Āda<br>Source: KN325P1 |
| NATIONAL | LUXEMBOURG | Long Term: 2.5 mg/m3 - 1 ppm; Short Term: 7.6 mg/m3 - 3 ppm<br>Peau<br>Source: Mémorial A n.226 du 22 mars 2021 |
| NATIONAL | MALTA | Long Term: 2.5 mg/m3 - 1 ppm; Short Term: 7.6 mg/m3 - 3 ppm<br>skin<br>Source: S.L.424.24 |
| NATIONAL | PORTUGAL | Long Term: 2.5 mg/m3 - 1 ppm; Short Term: 7.6 mg/m3 - 3 ppm<br>Cutânea<br>Source: Decreto-Lei n.º 1/2021 |
| NATIONAL | ROMANIA | Long Term: 2.5 mg/m3 - 1 ppm; Short Term: 7.6 mg/m3 - 3 ppm<br>P, Dir. 2006/15<br>Source: Republicarea 1 - nr. 743 din 29 iulie 2021 |
| NATIONAL | SLOVENIA | Long Term: 2.5 mg/m3 - 1 ppm; Short Term: 7.6 mg/m3 - 3 ppm<br>K, Y, EU2<br>Source: UL št. 72, 11. 5. 2021 |
| NATIONAL | SPAIN | Long Term: 2.5 mg/m3 - 1 ppm; Short Term: 7.5 mg/m3 - 3 ppm<br>vía dérmica, VLI<br>Source: LEP 2022 |
| EU | | Long Term: 2.5 mg/m3 - 1 ppm (8h); Short Term: 7.6 mg/m3 - 3 ppm<br>Skin |

**Predicted No Effect Concentration (PNEC) values**

| | |
|---|---|
| 1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one<br>CAS: 2634-33-5 | Exposure Route: Fresh Water; PNEC Limit: 4.03 µg/l |
| | Exposure Route: Intermittent releases (fresh water); PNEC Limit: 1.1 µg/l |
| | Exposure Route: Marine water; PNEC Limit: 403 ng/L |
| | Exposure Route: Intermittent releases (marine water); PNEC Limit: 110 ng/L |
| | Exposure Route: Microorganisms in sewage treatments; PNEC Limit: 1.03 mg/l |
| | Exposure Route: Freshwater sediments; PNEC Limit: 49.9 µg/kg |
| | Exposure Route: Marine water sediments; PNEC Limit: 4.99 µg/kg |
| | Exposure Route: Soil; PNEC Limit: 3 mg/kg |
| reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)<br>CAS: 55965-84-9 | Exposure Route: Fresh Water; PNEC Limit: 3.39 µg/l |
| | Exposure Route: Intermittent releases (fresh water); PNEC Limit: 3.39 µg/l |
| | Exposure Route: Marine water; PNEC Limit: 3.39 µg/l |
| | Exposure Route: Intermittent releases (marine water); PNEC Limit: 3.39 µg/l |
| | Exposure Route: Microorganisms in sewage treatments; PNEC Limit: 230 µg/l |
| | Exposure Route: Freshwater sediments; PNEC Limit: 27 µg/l |
| | Exposure Route: Marine water sediments; PNEC Limit: 27 µg/l |
| | Exposure Route: Soil; PNEC Limit: 10 µg/l |

**Derived No Effect Level (DNEL) values**

| | |
|---|---|
| 1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one<br>CAS: 2634-33-5 | Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects<br>Worker Professional: 6.81 mg/m³; Consumer: 1.2 mg/m³ |
| | Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects<br>Worker Professional: 966 µg/kg; Consumer: 345 µg/kg |

| | |
|---|---|
| reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)<br>CAS: 55965-84-9 | Exposure Route: Human Inhalation; Exposure Frequency: Long Term, local effects<br>Worker Professional: 20 µg/m³; Consumer: 20 µg/m³ |
| | Exposure Route: Human Inhalation; Exposure Frequency: Short Term, local effects<br>Worker Professional: 40 µg/m³; Consumer: 20 µg/m³ |
| | Exposure Route: Human Oral; Exposure Frequency: Long Term, systemic effects<br>Consumer: 90 µg/kg |
| | Exposure Route: Human Oral; Exposure Frequency: Short Term, systemic effects<br>Consumer: 110 µg/kg |

**8.2. Exposure controls**

Eye protection:

Eye glasses with side protection.(EN166)

Protection for skin:

Chemical protection clothing. Safety shoes.

Protection for hands:

Nitrile rubber .

Respiratory protection:

N.A.

Thermal Hazards:

Not expected if used as intended

Environmental exposure controls:

Prevent the product from entering sewers or surface and underground water.

## SECTION 9: Physical and chemical properties

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

Physical state: Liquid

Colour: Whitish

Odour: Characteristic

Odour threshold: N.A.

pH: =7.50

Kinematic viscosity: N.A.

Melting point/freezing point: N.A.

Boiling point or initial boiling point and boiling range: N.A.

Flash point: > 93°C

Lower and upper explosion limit: N.A.

Relative vapour density: N.A.

Vapour pressure: N.A.

Density and/or relative density: 1.02 g/cm3

Solubility in water: Soluble

Solubility in oil: N.A.

Partition coefficient n-octanol/water (log value): N.A.

Auto-ignition temperature: N.A.

Decomposition temperature: N.A.

Flammability: N.A.

Volatile Organic compounds - VOCs = 0.00 % ; 0.01 g/l

**Particle characteristics:**

Particle size: N.A.

**9.2. Other information**

No other relevant information

## SECTION 10: Stability and reactivity

**10.1. Reactivity**

Stable under normal conditions

**10.2. Chemical stability**

Data not available.

**10.3. Possibility of hazardous reactions**

None.

**10.4. Conditions to avoid**

Stable under normal conditions.

**10.5. Incompatible materials**

None in particular.

**10.6. Hazardous decomposition products**

None.

## SECTION 11: Toxicological information

**11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008**

**Toxicological Information of the Preparation**

| | |
|---|---|
| a) acute toxicity | Not classified |
| | Based on available data, the classification criteria are not met |
| b) skin corrosion/irritation | Not classified |
| | Based on available data, the classification criteria are not met |
| c) serious eye damage/irritation | Not classified |
| | Based on available data, the classification criteria are not met |
| d) respiratory or skin sensitisation | Not classified |
| | Based on available data, the classification criteria are not met |
| e) germ cell mutagenicity | Not classified |
| | Based on available data, the classification criteria are not met |
| f) carcinogenicity | Not classified |
| | Based on available data, the classification criteria are not met |
| g) reproductive toxicity | Not classified |
| | Based on available data, the classification criteria are not met |
| h) STOT-single exposure | Not classified |
| | Based on available data, the classification criteria are not met |
| i) STOT-repeated exposure | Not classified |
| | Based on available data, the classification criteria are not met |
| j) aspiration hazard | Not classified |
| | Based on available data, the classification criteria are not met |

**Toxicological information on main components of the mixture:**

| | | | |
|---|---|---|---|
| 1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one | a) acute toxicity | LD50 Oral Rat = 670 mg/kg | |
| | | LD50 Skin Rat > 2000 mg/kg | |
| | b) skin corrosion/irritation | Skin Irritant Rabbit Negative | |
| | c) serious eye damage/irritation | Eye Corrosive Positive | irreversible damage |
| | d) respiratory or skin sensitisation | Skin Sensitization Guineapig Positive | |
| | f) carcinogenicity | Genotoxicity Rat Negative | Oral route |
| | g) reproductive toxicity | No Observed Adverse Effect Level Oral Rat = 112 mg/kg | |
| reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) | a) acute toxicity | LD50 Oral Rat = 69 mg/kg | |
| | | LD50 Skin Rabbit = 141 mg/kg | |
| | | LC50 Inhalation Rat = 0.33 mg/l 4h | |
| | b) skin corrosion/irritation | Skin Irritant Rabbit Positive | |
| | c) serious eye damage/irritation | Eye Corrosive Rabbit Positive | |
| | d) respiratory or skin sensitisation | Skin Sensitization Positive | |

| | |
|---|---|
| f) carcinogenicity | Genotoxicity Negative |
| | Carcinogenicity Skin Negative |
| g) reproductive toxicity | No Observed Adverse Effect Level Oral Rat = 22.7 mg/kg |

**11.2. Information on other hazards**

**Endocrine disrupting properties:**

No endocrine disruptor substances present in concentration >= 0.1%

## SECTION 12: Ecological information

**12.1. Toxicity**

Adopt good working practices, so that the product is not released into the environment.

Eco-Toxicological Information:

**List of Eco-Toxicological properties of the product**

Not classified for environmental hazards.

No data available for the product

**List of Eco-Toxicological properties of the components**

| Component | Ident. Numb. | Ecotox Data |
|---|---|---|
| 1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one | CAS: 2634-33-5 - EINECS: 220-120-9 - INDEX: 613-088-00-6 | a) Aquatic acute toxicity : LC50 Fish Oncorynchus mykiss = 2.15 mg/L 96h OECD Guideline 203 |
| | | a) Aquatic acute toxicity : EC50 Daphnia Daphnia magna = 2.9 mg/L 48h OECD Guideline 202 |
| | | a) Aquatic acute toxicity : EC50 Algae green alga Selenastrum capricornutum freshwater algae = 110 µg/L OECD Guideline 201 |
| | | d) Terrestrial toxicity : EC50 Worm Eisenia fetida > 410.6 mg/kg OECD Guideline 207 - Duration 14d |
| | | d) Terrestrial toxicity : EC10 soil microorganisms = 263.7 mg/kg - long term |
| | | a) Aquatic acute toxicity : NOEC Sludge activated sludge 10.3 mg/L 3h OECD Guideline 209 |
| | | e) Plant toxicity : LC50 Triticum aestivum = 200 mg/kg OECD Guideline 208 |
| reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) | CAS: 55965-84-9 - INDEX: 613-167-00-5 | a) Aquatic acute toxicity : LC50 Fish Oncorhynchus mykiss = 0.19 mg/L 96h EPA OPP 72-1 (Fish Acute Toxicity Test) |
| | | b) Aquatic chronic toxicity : NOEC Fish Danio rerio = 0.02 mg/L ,,OECD Guideline 210 (Fish, Early-Life Stage Toxicity Test) - 35days |
| | | a) Aquatic acute toxicity : LC50 Daphnia Daphnia magna = 0.16 mg/L 48h EPA OPP 72-2 (Aquatic Invertebrate Acute Toxicity Test) |
| | | b) Aquatic chronic toxicity : NOEC Daphnia Daphnia magna = 0.1 mg/L EPA OPP 72-4 (Fish Early Life-Stage and Aquatic Invertebrate Life-Cycle Studies) - 21days |
| | | a) Aquatic acute toxicity : EC50 Algae Skeletonema costatum = 0 mg/L 96h ,,OECD Guideline 201 (Alga, Growth Inhibition Test) |
| | | a) Aquatic acute toxicity : EC50 Sludge activated sludge = 4.5 mg/L 3h ,,OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test) |
| | | d) Terrestrial toxicity : LC50 Worm Eisenia fetida = 613 mg/kg ,,OECD Guideline 207 (Earthworm, Acute Toxicity Tests) - 14days |
| | | e) Plant toxicity : NOEC Trifolium pratense, Oryza sativa, Brassica napus = 1000 mg/L OECD Guideline 208 (Terrestrial Plants Test: Seedling Emergence and Seedling Growth Test) - 21days |

**12.2. Persistence and degradability**

| Component | Persitence/Degradability: | Test | Notes: |
|---|---|---|---|
| 1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one | Non-readily biodegradable | CO2 production | OECD Guideline 301C |
| reaction mass of 5-chloro-2- | Non-readily biodegradable | | |

methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)

**12.3. Bioaccumulative potential**

| Component | Bioaccumulation | Test | Value | Notes: |
|---|---|---|---|---|
| 1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one | Bioaccumulative | BCF - Bioconcentrantion factor | 6.620 | |
| reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) | Bioaccumulative | BCF - Bioconcentrantion factor | 54.000 | ≤ 54 |

**12.4. Mobility in soil**

N.A.

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

No PBT or vPvB substances present in concentration >= 0.1%

**12.6. Endocrine disrupting properties**

No endocrine disruptor substances present in concentration >= 0.1%

**12.7. Other adverse effects**

N.A.

## SECTION 13: Disposal considerations

**13.1. Waste treatment methods**

Recover if possible. In so doing, comply with the local and national regulations currently in force. Disposal through discharge into wastewater is not permitted

The product disposed of as such, pursuant to Regulation (EU) 1357/2014, must be classified as non-hazardous waste

A waste code according to the European List of Wastes (LoW) cannot be specified, due to dependence on the usage. Contact an authorized waste disposal service.

**Properties of waste which render it hazardous (Annex III, Directive 2008/98/EC):**

N.A.

## SECTION 14: Transport information

Not classified as dangerous in the meaning of transport regulations.

**14.1. UN number or ID number**

N/A

**14.2. UN proper shipping name**

ADR-Shipping Name: N/A

IATA-Shipping Name: N/A

IMDG-Shipping Name: N/A

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

ADR-Class: N/A

IATA-Class: N/A

IMDG-Class: N/A

**14.4. Packing group**

ADR-Packing Group: N/A

IATA-Packing group: N/A

IMDG-Packing group: N/A

**14.5. Environmental hazards**

Marine pollutant: No

Environmental Pollutant: No

IMDG-EMS: N/A

**14.6. Special precautions for user**

Road and Rail (ADR-RID):

ADR-Label: N/A

ADR - Hazard identification number: N/A

ADR-Special Provisions: N/A

ADR-Transport category (Tunnel restriction code): N/A

ADR Limited Quantities: N/A

ADR Excepted Quantities: N/A

Air (IATA):

IATA-Passenger Aircraft: N/A

IATA-Cargo Aircraft: N/A

IATA-Label: N/A

IATA-Subsidiary hazards: N/A

IATA-Erg: N/A

IATA-Special Provisions: N/A

Sea (IMDG):

IMDG-Stowage and handling: N/A

IMDG-Segregation: N/A

IMDG-Subsidiary hazards: N/A

IMDG-Special Provisions: N/A

**14.7. Maritime transport in bulk according to IMO instruments**

N.A.

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## SECTION 15: Regulatory information

**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

Dir. 98/24/EC (Risks related to chemical agents at work)

Dir. 2000/39/EC (Occupational exposure limit values)

Regulation (EC) n. 1907/2006 (REACH)

Regulation (EC) n. 1272/2008 (CLP)

Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013

Regulation (EU) n. 286/2011 (ATP 2 CLP)

Regulation (EU) n. 618/2012 (ATP 3 CLP)

Regulation (EU) n. 487/2013 (ATP 4 CLP)

Regulation (EU) n. 944/2013 (ATP 5 CLP)

Regulation (EU) n. 605/2014 (ATP 6 CLP)

Regulation (EU) n. 2015/1221 (ATP 7 CLP)

Regulation (EU) n. 2016/918 (ATP 8 CLP)

Regulation (EU) n. 2016/1179 (ATP 9 CLP)

Regulation (EU) n. 2017/776 (ATP 10 CLP)

Regulation (EU) n. 2018/669 (ATP 11 CLP)

Regulation (EU) n. 2018/1480 (ATP 13 CLP)

Regulation (EU) n. 2019/521 (ATP 12 CLP)

Regulation (EU) n. 2020/217 (ATP 14 CLP)

Regulation (EU) n. 2020/1182 (ATP 15 CLP)

Regulation (EU) n. 2021/643 (ATP 16 CLP)

Regulation (EU) n. 2021/849 (ATP 17 CLP)

Regulation (EU) n. 2022/692 (ATP 18 CLP)

Regulation (EU) n. 2023/707

Regulation (EU) n. 2023/1434 (ATP 19 CLP)

Regulation (EU) n. 2023/1435 (ATP 20 CLP)

Regulation (EU) n. 2024/197 (ATP 21 CLP)

Regulation (EU) n. 2020/878

Regulation (EC) nr 648/2004 (Detergents).

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product: None.

Restrictions related to the substances contained: 28, 75

Provisions related to directive EU 2012/18 (Seveso III):

None

**Explosives precursors – Regulation 2019/1148**

No substances listed

**Regulation (EU) No 649/2012 (PIC regulation)**

No substances listed

**German Water Hazard Class.**

3: Severe hazard to waters

**German Lagerklasse according to TRGS 510:**

LGK 10

SVHC Substances:

No SVHC substances present in concentration >= 0.1%

**REGULATION (EU) No 528/2012**

The product is identified as an article treated pursuant to art. 58 of Regulation (EU) no. 528/2012 and subsequent amendments.

Substances included in Regulation (EU) n. 528/2012 (concerning the making available on the market and use of biocidal products): Nomenclature IUPAC: Mixture of 5-chloro-2-methyl-2H- isothiazol-3-one (EINECS 247-500-7) and 2-methyl-2H-isothiazol-3-one (EINECS 220-239-6) (Mixture of CMIT/MIT)

Nomenclature BPR: C(M)IT/MIT (3:1)

CAS number: 55965-84-9

Product-type 6: Preservatives for products during storage

Assessment status: Approved

Commission Implementing Regulation (EU) 2016/131

**15.2. Chemical safety assessment**

No Chemical Safety Assessment has been carried out for the mixture.

## SECTION 16: Other information

| Code | Description |
|---|---|
| H302 | Harmful if swallowed. |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H318 | Causes serious eye damage. |
| H330 | Fatal if inhaled. |
| H400 | Very toxic to aquatic life. |
| H410 | Very toxic to aquatic life with long lasting effects. |

| Code | Hazard class and hazard category | Description |
|---|---|---|
| 3.1/2/Inhal | Acute Tox. 2 | Acute toxicity (inhalation), Category 2 |
| 3.1/4/Oral | Acute Tox. 4 | Acute toxicity (oral), Category 4 |
| 3.2/2 | Skin Irrit. 2 | Skin irritation, Category 2 |
| 3.3/1 | Eye Dam. 1 | Serious eye damage, Category 1 |
| 3.4.2/1A | Skin Sens. 1A | Skin Sensitisation, Category 1A |
| 4.1/A1 | Aquatic Acute 1 | Acute aquatic hazard, category 1 |
| 4.1/C1 | Aquatic Chronic 1 | Chronic (long term) aquatic hazard, category 1 |

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

Legend to abbreviations and acronyms used in the safety data sheet:

ACGIH: American Conference of Governmental Industrial Hygienists

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

AND: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

ATE: Acute Toxicity Estimate

ATEmix: Acute toxicity Estimate (Mixtures)

BCF: Biological Concentration Factor

BEI: Biological Exposure Index

BOD: Biochemical Oxygen Demand

CAS: Chemical Abstracts Service (division of the American Chemical Society).

CAV: Poison Center

CE: European Community

CLP: Classification, Labeling, Packaging.

CMR: Carcinogenic, Mutagenic and Reprotoxic

COD: Chemical Oxygen Demand

COV: Volatile Organic Compound

CSA: Chemical Safety Assessment

CSR: Chemical Safety Report

DMEL: Derived Minimal Effect Level

DNEL: Derived No Effect Level.

DPD: Dangerous Preparations Directive

DSD: Dangerous Substances Directive
EC50: Half Maximal Effective Concentration
ECHA: European Chemicals Agency
EINECS: European Inventory of Existing Commercial Chemical Substances.
ES: Exposure Scenario
GefStoffVO: Ordinance on Hazardous Substances, Germany.
GHS: Globally Harmonized System of Classification and Labeling of Chemicals.
IARC: International Agency for Research on Cancer
IATA: International Air Transport Association.
IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
IC50: half maximal inhibitory concentration
ICAO: International Civil Aviation Organization.
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG: International Maritime Code for Dangerous Goods.
INCI: International Nomenclature of Cosmetic Ingredients.
IRCCS: Scientific Institute for Research, Hospitalization and Health Care
KAFH: Keep Away From Heat
KSt: Explosion coefficient.
LC50: Lethal concentration, for 50 percent of test population.
LD50: Lethal dose, for 50 percent of test population.
LDLo: Leathal Dose Low
N.A.: Not Applicable
N/A: Not Applicable
N/D: Not defined/ Not available
NA: Not available
NIOSH: National Institute for Occupational Safety and Health
NOAEL: No Observed Adverse Effect Level
OSHA: Occupational Safety and Health Administration
PBT: Persistent, Bioaccumulative and Toxic
PGK: Packaging Instruction
PNEC: Predicted No Effect Concentration.
PSG: Passengers
RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL: Short Term Exposure limit.
STOT: Specific Target Organ Toxicity.
TLV: Threshold Limiting Value.
TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).
vPvB: Very Persistent, Very Bioaccumulative.
WGK: German Water Hazard Class.

**Paragraphs modified from the previous revision:**

- SECTION 1: Identification of the substance/mixture and of the company/undertaking
- SECTION 2: Hazards identification
- SECTION 3: Composition/information on ingredients
- SECTION 7: Handling and storage
- SECTION 8: Exposure controls/personal protection
- SECTION 9: Physical and chemical properties
- SECTION 11: Toxicological information
- SECTION 12: Ecological information
- SECTION 13: Disposal considerations
- SECTION 14: Transport information
- SECTION 15: Regulatory information
- SECTION 16: Other information