# SAFETY DATA SHEET

TEKNOSAFE FLAME PROTECT 2458-00 - BASE 3

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

### 1.1 Product identifier

**Product name** : TEKNOSAFE FLAME PROTECT 2458-00 - BASE 3

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

**Product use** : Paint.

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

Teknos Group Oy, Takkatie 3, FI-00370 HELSINKI, FINLAND. Tel. +358 9 506 091.

**e-mail address of person responsible for this SDS** : Prod-safe@teknos.com

**National contact**

Teknos Group Oy, Takkatie 3, FI-00370 HELSINKI, FINLAND. Tel. +358 9 506 091.

### 1.4 Emergency telephone number

**National advisory body/Poison Centre**

**Telephone number** : Malta Competition and Consumer Affairs Authority (MCCAA): +356 2395 2000

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

**Product definition** : Mixture

**Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]**

Skin Sens. 1, H317

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

### 2.2 Label elements

**Hazard pictograms** :

**Signal word** : Warning

**Hazard statements** : H317 - May cause an allergic skin reaction.

**Precautionary statements**

**Prevention** : P280 - Wear protective gloves.
P261 - Avoid breathing vapour.

**Response** : P302 + P352 - IF ON SKIN: Wash with plenty of water.
P333 + P313 - If skin irritation or rash occurs: Get medical advice or attention.
P362 + P364 - Take off contaminated clothing and wash it before reuse.

**Storage** : Not applicable.

**Disposal** : P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

**Hazardous ingredients** : Contains: 1,2-benzisothiazol-3(2H)-one and reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)

## SECTION 2: Hazards identification

**Supplemental label elements** : Contains biocidal products for in-can preservation: C(M)IT/MIT (3:1).

**Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles** :

### 2.3 Other hazards

**Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII** : This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

**Other hazards which do not result in classification** : None known.

## SECTION 3: Composition/information on ingredients

**3.2 Mixtures** : Mixture

| Product/ingredient name | Identifiers | % | Classification | Specific Conc. Limits, M-factors and ATEs | Type |
|---|---|---|---|---|---|
| 2-(2-butoxyethoxy)ethanol | REACH #: 01-2119475104-44<br>EC: 203-961-6<br>CAS: 112-34-5<br>Index: 603-096-00-8 | ≤3 | Eye Irrit. 2, H319 | - | [1] [2] |
| Zinc borate | REACH #: 01-2119691658-19<br>CAS: 138265-88-0 | <1 | Repr. 2, H361d<br>Aquatic Acute 1, H400<br>Aquatic Chronic 2, H411 | M [Acute] = 1 | [1] |
| Ammonia | REACH #: 01-2119488876-14<br>EC: 215-647-6<br>CAS: 1336-21-6<br>Index: 007-001-01-2 | ≤0.3 | Skin Corr. 1B, H314<br>Eye Dam. 1, H318<br>STOT SE 3, H335<br>Aquatic Acute 1, H400 | STOT SE 3, H335: C ≥ 5%<br>M [Acute] = 1 | [1] [2] |
| 2-Butoxyethanol | REACH #: 01-2119475108-36<br>EC: 203-905-0<br>CAS: 111-76-2<br>Index: 603-014-00-0 | ≤0.3 | Acute Tox. 4, H302<br>Acute Tox. 3, H331<br>Skin Irrit. 2, H315<br>Eye Irrit. 2, H319 | ATE [Oral] = 1200 mg/kg<br>ATE [Inhalation (vapours)] = 3 mg/l | [1] [2] |
| 1,2-benzisothiazol-3(2H)-one | EC: 220-120-9<br>CAS: 2634-33-5<br>Index: 613-088-00-6 | <0.036 | Acute Tox. 4, H302<br>Acute Tox. 2, H330<br>Skin Irrit. 2, H315<br>Eye Dam. 1, H318<br>Skin Sens. 1A, H317<br>Aquatic Acute 1, H400<br>Aquatic Chronic 1, H410 | ATE [Oral] = 450 mg/kg<br>ATE [Inhalation (dusts and mists)] = 0.21 mg/l<br>Skin Sens. 1, H317: C ≥ 0.036%<br>M [Acute] = 1<br>M [Chronic] = 1 | [1] |
| reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1) | EC: 911-418-6<br>CAS: 55965-84-9<br>Index: 613-167-00-5 | <0.0025 | Acute Tox. 3, H301<br>Acute Tox. 2, H310<br>Acute Tox. 2, H330<br>Skin Corr. 1C, H314<br>Eye Dam. 1, H318<br>Skin Sens. 1A, H317<br>Aquatic Acute 1, H400 | ATE [Oral] = 53 mg/kg<br>ATE [Dermal] = 50 mg/kg<br>ATE [Inhalation (vapours)] = 0.5 mg/l | [1] |

## SECTION 3: Composition/information on ingredients

| | | | | | |
|---|---|---|---|---|---|
| | | | Aquatic Chronic 1, H410<br>EUH071<br><br>**See Section 16 for the full text of the H statements declared above.** | Skin Corr. 1C, H314: C ≥ 0.6%<br>Eye Dam. 1, H318: C ≥ 0.6%<br>Eye Irrit. 2, H319: 0.06% ≤ C < 0.6%<br>Skin Sens. 1, H317: C ≥ 0.0015%<br>M [Acute] = 100<br>M [Chronic] = 100 | |

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Type

[1] Substance classified with a health or environmental hazard
[2] Substance with a workplace exposure limit

Occupational exposure limits, if available, are listed in Section 8.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

**Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.

**Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

**Skin contact** : Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.

**Ingestion** : Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

**Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

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

**Over-exposure signs/symptoms**

**Eye contact** : No specific data.

**Inhalation** : No specific data.

**Skin contact** : Adverse symptoms may include the following:
irritation
redness

## SECTION 4: First aid measures

**Ingestion** : No specific data.

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

**Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

**Specific treatments** : No specific treatment.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

**Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.

**Unsuitable extinguishing media** : None known.

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

**Hazards from the substance or mixture** : In a fire or if heated, a pressure increase will occur and the container may burst.

**Hazardous combustion products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
metal oxide/oxides

### 5.3 Advice for firefighters

**Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

**Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

## SECTION 6: Accidental release measures

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

**For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

**For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**6.2 Environmental precautions** : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### 6.3 Methods and material for containment and cleaning up

**Small spill** : Stop leak if without risk. Move containers from spill area. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

## SECTION 6: Accidental release measures

**Large spill** : Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.

**6.4 Reference to other sections** : See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

## SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

### 7.1 Precautions for safe handling

**Protective measures** : Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapour or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

**Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

### 7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

### 7.3 Specific end use(s)

**Recommendations** : Not available.

**Industrial sector specific solutions** : Not available.

## SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker exposure or environmental releases.

### 8.1 Control parameters

**Occupational exposure limits**

| Product/ingredient name | Exposure limit values |
|---|---|
| 2-(2-butoxyethoxy)ethanol | **EU OEL (Europe, 1/2022)**<br>TWA 8 hours: 67.5 mg/m³.<br>TWA 8 hours: 10 ppm.<br>STEL 15 minutes: 101.2 mg/m³.<br>STEL 15 minutes: 15 ppm. |
| Ammonia | **EU OEL (Europe, 1/2022) [ammonia, anhydrous]**<br>TWA 8 hours: 20 ppm.<br>TWA 8 hours: 14 mg/m³.<br>STEL 15 minutes: 50 ppm.<br>STEL 15 minutes: 36 mg/m³. |

| | |
|---|---|
| 2-Butoxyethanol | **EU OEL (Europe, 1/2022)** Absorbed through skin.<br>TWA 8 hours: 20 ppm.<br>TWA 8 hours: 98 mg/m³.<br>STEL 15 minutes: 50 ppm.<br>STEL 15 minutes: 246 mg/m³. |

**Biological exposure indices**

| Product/ingredient name | Exposure indices |
|---|---|
| No exposure indices known. | |

**Recommended monitoring procedures** : Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

**DNELs/DMELs**

| Product/ingredient name | Result |
|---|---|
| 2-(2-butoxyethoxy)ethanol | **DNEL - General population - Long term - Oral**<br>6.25 mg/kg bw/day<br>Effects: Systemic<br><br>**DNEL - Workers - Long term - Inhalation**<br>67.5 mg/m³<br>Effects: Local<br><br>**DNEL - Workers - Short term - Inhalation**<br>101.2 mg/m³<br>Effects: Local |
| 2-Butoxyethanol | **DNEL - General population - Long term - Oral**<br>6.3 mg/kg bw/day<br>Effects: Systemic<br><br>**DNEL - General population - Short term - Oral**<br>26.7 mg/kg bw/day<br>Effects: Systemic<br><br>**DNEL - General population - Long term - Inhalation**<br>59 mg/m³<br>Effects: Systemic<br><br>**DNEL - Workers - Long term - Inhalation**<br>98 mg/m³<br>Effects: Systemic<br><br>**DNEL - General population - Short term - Inhalation**<br>147 mg/m³<br>Effects: Local<br><br>**DNEL - Workers - Short term - Inhalation**<br>246 mg/m³<br>Effects: Local<br><br>**DNEL - General population - Short term - Inhalation**<br>426 mg/m³<br>Effects: Systemic<br><br>**DNEL - Workers - Short term - Inhalation**<br>1091 mg/m³ |

| | |
|---|---|
| | Effects: Systemic |
| 1,2-benzisothiazol-3(2H)-one | **DNEL - General population - Long term - Dermal**<br>0.345 mg/kg bw/day<br>Effects: Systemic<br><br>**DNEL - Workers - Long term - Dermal**<br>0.966 mg/kg bw/day<br>Effects: Systemic<br><br>**DNEL - General population - Long term - Inhalation**<br>1.2 mg/m³<br>Effects: Systemic<br><br>**DNEL - Workers - Long term - Inhalation**<br>6.81 mg/m³<br>Effects: Systemic |
| reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1) | **DNEL - General population - Long term - Inhalation**<br>0.02 mg/m³<br>Effects: Local<br><br>**DNEL - Workers - Long term - Inhalation**<br>0.02 mg/m³<br>Effects: Local<br><br>**DNEL - General population - Short term - Inhalation**<br>0.04 mg/m³<br>Effects: Local<br><br>**DNEL - Workers - Short term - Inhalation**<br>0.04 mg/m³<br>Effects: Local<br><br>**DNEL - General population - Long term - Oral**<br>0.09 mg/kg bw/day<br>Effects: Systemic<br><br>**DNEL - General population - Short term - Oral**<br>0.11 mg/kg bw/day<br>Effects: Systemic |

**PNECs**

Not available.

### 8.2 Exposure controls

**Appropriate engineering controls** : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

**Individual protection measures**

**Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

## SECTION 8: Exposure controls/personal protection

**Skin protection**

**Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Recommendations : Wear suitable gloves tested to EN374.

> 8 hours (breakthrough time): Nitrile gloves. thickness > 0.3 mm

Not recommended polyvinyl alcohol (PVA) gloves

**Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Filter type (spray application): A P

**Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

## SECTION 9: Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

### 9.1 Information on basic physical and chemical properties

**Appearance**

**Physical state** : Liquid.

**Colour** : Clear.

**Odour** : Slight

**Odour threshold** : Not available.

**Melting point/freezing point** : Not available.

**Initial boiling point and boiling range** :

| Ingredient name | °C | °F | Method |
|---|---|---|---|
| water | 100 | 212 | |
| 2-(2-butoxyethoxy)ethanol | 225 to 227.6 | 437 to 441.7 | |

**Flammability** : Not available.

**Lower and upper explosion limit** : Lower: Not applicable.
Upper: Not applicable.

**Flash point** : Closed cup: >100°C (>212°F)

**Auto-ignition temperature** :

| Ingredient name | °C | °F | Method |
|---|---|---|---|
| 2-(2-butoxyethoxy)ethanol | 210 | 410 | DIN 51794 |
| 2,2,4-trimethylpentane-1,3-diol isobutyrate | 393 | 739.4 | |

**Decomposition temperature** : Not available.

**pH** : 6 to 9 [Conc. (% w/w): 100%]

**Viscosity** : Not available.

## SECTION 9: Physical and chemical properties

**Solubility(ies)** :

Not available.

**Solubility in water** : Not available.

**Partition coefficient: n-octanol/water** : Not applicable.

**Vapour pressure** :

| Ingredient name | Vapour Pressure at 20°C | | | Vapour pressure at 50°C | | |
|---|---|---|---|---|---|---|
| | mm Hg | kPa | Method | mm Hg | kPa | Method |
| water | 17.5 | 2.3 | | | | |
| 2-(2-butoxyethoxy)ethanol | 0.022 | 0.0029 | | | | |

**Relative density** : Not available.

**Density** : 1.1 g/cm³

**Vapour density** : Not available.

**Particle characteristics**

**Median particle size** : Not applicable.

### 9.2 Other information

#### 9.2.1 Information with regard to physical hazard classes

**Explosive properties** : Not available.

**Oxidising properties** : Not available.

#### 9.2.2 Other safety characteristics

Not applicable.

## SECTION 10: Stability and reactivity

**10.1 Reactivity** : No specific test data related to reactivity available for this product or its ingredients.

**10.2 Chemical stability** : The product is stable.

**10.3 Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.

**10.4 Conditions to avoid** : No specific data.

**10.5 Incompatible materials** : No specific data.

**10.6 Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

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

**Acute toxicity**

| Product/ingredient name | Result |
|---|---|
| 2-(2-butoxyethoxy)ethanol | **Rabbit - Dermal - LD50**<br>2700 mg/kg<br><br>**Rat - Oral - LD50**<br>4500 mg/kg<br>Toxic effects: Behavioral - Tetany Lung, Thorax, or Respiration - Dyspnea Liver - Other changes |
| Ammonia | **Rat - Oral - LD50**<br>350 mg/kg<br>Toxic effects: Gastrointestinal - Other changes Liver - Other |

changes Kidney, Ureter, and Bladder - Other changes

| | |
|---|---|
| 1,2-benzisothiazol-3(2H)-one | **Rat - Oral - LD50**<br>1020 mg/kg |
| reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1) | **Rat - Oral - LD50**<br>53 mg/kg<br>Toxic effects: Behavioral - Somnolence (general depressed activity) Behavioral - Ataxia Lung, Thorax, or Respiration - Respiratory depression |

**Conclusion/Summary [Product]** : Not available.

**Acute toxicity estimates**

| Product/ingredient name | Oral (mg/kg) | Dermal (mg/kg) | Inhalation (gases) (ppm) | Inhalation (vapours) (mg/l) | Inhalation (dusts and mists) (mg/l) |
|---|---|---|---|---|---|
| TEKNOSAFE FLAME PROTECT 2458-00 | N/A | N/A | N/A | 3000.0 | N/A |
| 2-(2-butoxyethoxy)ethanol | 4500 | 2700 | N/A | N/A | N/A |
| 2-Butoxyethanol | 1200 | N/A | N/A | 3 | N/A |
| 1,2-benzisothiazol-3(2H)-one | 450 | N/A | N/A | N/A | 0.21 |
| reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1) | 53 | 50 | N/A | 0.5 | N/A |

**Skin corrosion/irritation**

| Product/ingredient name | Result |
|---|---|
| 2-Butoxyethanol | **Rabbit - Skin - Mild irritant**<br>Amount/concentration applied: 500 mg |
| 1,2-benzisothiazol-3(2H)-one | **Human - Skin - Mild irritant**<br>Duration of treatment/exposure: 48 hours<br>Amount/concentration applied: 5 % |
| reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1) | **Human - Skin - Severe irritant**<br>Amount/concentration applied: 0.01 % |

**Conclusion/Summary [Product]** : Not available.

**Serious eye damage/eye irritation**

| Product/ingredient name | Result |
|---|---|
| 2-(2-butoxyethoxy)ethanol | **Rabbit - Eyes - Moderate irritant**<br>Duration of treatment/exposure: 24 hours<br>Amount/concentration applied: 20 mg<br><br>**Rabbit - Eyes - Severe irritant**<br>Amount/concentration applied: 20 mg |
| Ammonia | **Rabbit - Eyes - Severe irritant**<br>Amount/concentration applied: 250 ug<br><br>**Rabbit - Eyes - Severe irritant**<br>Amount/concentration applied: 44 ug<br><br>**Rabbit - Eyes - Severe irritant**<br>Duration of treatment/exposure: 0.5 minutes<br>Amount/concentration applied: 1 mg |

| | |
|---|---|
| 2-Butoxyethanol | **Rabbit - Eyes - Moderate irritant**<br>Duration of treatment/exposure: 24 hours<br>Amount/concentration applied: 100 mg<br><br>**Rabbit - Eyes - Severe irritant**<br>Amount/concentration applied: 100 mg |

**Conclusion/Summary [Product]** : Not available.

**Respiratory corrosion/irritation**

Not available.

**Conclusion/Summary [Product]** : Not available.

**Respiratory or skin sensitization**

Not available.

**Skin**

**Conclusion/Summary [Product]** : Not available.

**Respiratory**

**Conclusion/Summary [Product]** : Not available.

**Germ cell mutagenicity**

Not available.

**Conclusion/Summary [Product]** : Not available.

**Carcinogenicity**

Not available.

**Conclusion/Summary [Product]** : Not available.

**Reproductive toxicity**

Not available.

**Conclusion/Summary [Product]** : Not available.

**Specific target organ toxicity (single exposure)**

| Product/ingredient name | Result |
|---|---|
| Ammonia | STOT SE 3, H335 (Respiratory tract irritation) |

**Specific target organ toxicity (repeated exposure)**

Not available.

**Aspiration hazard**

Not available.

**Information on likely routes of exposure**

Not available.

**Potential acute health effects**

**Eye contact** : No known significant effects or critical hazards.

**Inhalation** : No known significant effects or critical hazards.

**Skin contact** : May cause an allergic skin reaction.

## SECTION 11: Toxicological information

**Ingestion** : No known significant effects or critical hazards.

**Symptoms related to the physical, chemical and toxicological characteristics**

**Eye contact** : No specific data.

**Inhalation** : No specific data.

**Skin contact** : Adverse symptoms may include the following:
irritation
redness

**Ingestion** : No specific data.

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

**Short term exposure**

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

**Long term exposure**

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

**Potential chronic health effects**

Not available.

**Conclusion/Summary [Product]** : Not available.

**General** : Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

**Carcinogenicity** : No known significant effects or critical hazards.

**Mutagenicity** : No known significant effects or critical hazards.

**Reproductive toxicity** : No known significant effects or critical hazards.

### 11.2 Information on other hazards

#### 11.2.1 Endocrine disrupting properties

Not available.

**Conclusion/Summary [Product]** : The product does not meet the criteria to be considered as having endocrine disrupting properties according to the criteria set out in either Regulation (EC) No. 1907/2006 or Regulation (EC) No 1272/2008.

#### 11.2.2 Other information

Not available.

## SECTION 12: Ecological information

### 12.1 Toxicity

| Product/ingredient name | Result |
|---|---|
| 2-(2-butoxyethoxy)ethanol | **Acute - LC50 - Fresh water**<br>Fish - Bluegill - *Lepomis macrochirus*<br>Size: 33 to 75 mm<br>1300000 µg/l [96 hours]<br>Effect: Mortality |
| Ammonia | **Acute - LC50 - Fresh water**<br>Fish - Western mosquitofish - *Gambusia affinis* - Adult<br>37 ppm [96 hours]<br>Effect: Mortality |
| 2-Butoxyethanol | **Acute - LC50 - Marine water**<br>Fish - Inland silverside - *Menidia beryllina*<br>Size: 40 to 100 mm<br>1250000 µg/l [96 hours]<br>Effect: Mortality |
| | **Acute - LC50 - Marine water**<br>Crustaceans - Common shrimp, sand shrimp - *Crangon* |

*crangon*
800000 µg/l [48 hours]
Effect: Mortality

1,2-benzisothiazol-3(2H)-one

**Acute - LC50 - Fresh water**
OECD [Fish, Acute Toxicity Test]
Fish - Trout - *Onorhynchus Mykiss*
1.9 mg/l [96 hours]

**Acute - EC50**
OECD 202 [Daphnia sp. Acute Immobilization Test and Reproduction Test]
Daphnia - Daphnia - *Daphnia Magna*
3.7 mg/l [48 hours]

**Acute - EC50 - Marine water**
OECD 201 [Alga, Growth Inhibition Test]
Algae - Algae - *Skeletonema Costatum*
0.36 mg/l [72 hours]

**Acute - NOEC - Marine water**
OECD 201 [Alga, Growth Inhibition Test]
Algae - Algae - *Skeletonema Costatum*
0.15 mg/l [72 hours]

**Conclusion/Summary [Product]** : Not available.

### 12.2 Persistence and degradability

| Product/ingredient name | Result |
|---|---|
| 1,2-benzisothiazol-3(2H)-one | EU<br>24% [28 days] |

**Conclusion/Summary [Product]** : Not available.

| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability |
|---|---|---|---|
| 1,2-benzisothiazol-3(2H)-one | - | - | Inherent |

### 12.3 Bioaccumulative potential

| Product/ingredient name | $LogP_{ow}$ | BCF | Potential |
|---|---|---|---|
| 2-(2-butoxyethoxy)ethanol | 1 | - | Low |
| 2-Butoxyethanol | 0.81 | - | Low |
| 1,2-benzisothiazol-3(2H)-one | - | 3.2 | Low |

### 12.4 Mobility in soil

**Soil/water partition coefficient**

| Product/ingredient name | logKoc | Koc |
|---|---|---|
| 2-(2-butoxyethoxy)ethanol | 1.56 | 36.5981 |
| 2-Butoxyethanol | 1.83 | 67.3685 |
| 1,2-benzisothiazol-3(2H)-one | 1.86 | 73.142 |

**Results of PMT and vPvM assessment**

| Product/ingredient name | PMT | P | M | T | vPvM | vP | vM |
|---|---|---|---|---|---|---|---|
| 2-(2-butoxyethoxy)ethanol | No | No | No | No | No | No | No |
| Zinc borate | No | No | No | No | No | No | No |
| Ammonia | No | No | No | No | No | No | No |
| 2-Butoxyethanol | No | No | No | No | No | No | No |
| 1,2-benzisothiazol-3(2H)-one | No | No | No | No | No | No | No |
| reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] | No | No | No | No | No | No | No |

## SECTION 12: Ecological information

| | | |
|---|---|---|
| and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1) | | |

**Mobility** : Not available.

**Conclusion/Summary** : The product does not meet the criteria to be considered as a PMT or vPvM.

### 12.5 Results of PBT and vPvB assessment

**Regulation (EC) No. 1907/2006 [REACH]**

| Product/ingredient name | PBT | P | B | T | vPvB | vP | vB |
|---|---|---|---|---|---|---|---|
| 2-(2-butoxyethoxy)ethanol | No | No | No | No | No | No | No |
| Zinc borate | No | No | No | No | No | No | No |
| Ammonia | No | No | No | No | No | No | No |
| 2-Butoxyethanol | No | No | No | No | No | No | No |
| 1,2-benzisothiazol-3(2H)-one | No | No | No | No | No | No | No |
| reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1) | No | No | No | No | No | No | No |

**Regulation (EC) No. 1272/2008 [CLP]**

| Product/ingredient name | PBT | P | B | T | vPvB | vP | vB |
|---|---|---|---|---|---|---|---|
| 2-(2-butoxyethoxy)ethanol | No | No | No | No | No | No | No |
| Zinc borate | No | No | No | No | No | No | No |
| Ammonia | No | No | No | No | No | No | No |
| 2-Butoxyethanol | No | No | No | No | No | No | No |
| 1,2-benzisothiazol-3(2H)-one | No | No | No | No | No | No | No |
| reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1) | No | No | No | No | No | No | No |

**Conclusion/Summary Regulation (EC) No. 1272/2008 [CLP]** : The product does not meet the criteria to be considered as a PBT or vPvB.

### 12.6 Endocrine disrupting properties

Not available.

**Conclusion/Summary [Product]** : The product does not meet the criteria to be considered as having endocrine disrupting properties according to the criteria set out in either Regulation (EC) No. 1907/2006 or Regulation (EC) No 1272/2008.

### 12.7 Other adverse effects

No known significant effects or critical hazards.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

**Product**

**Methods of disposal** : The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

## SECTION 13: Disposal considerations

**European waste catalogue (EWC)** : 080112, 200128

**Packaging**

**Methods of disposal** : The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

**Special precautions** : This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

## SECTION 14: Transport information

| | ADR/RID | ADN | IMDG | IATA |
|---|---|---|---|---|
| **14.1 UN number or ID number** | Not regulated. | Not regulated. | Not regulated. | Not regulated. |
| **14.2 UN proper shipping name** | - | - | - | - |
| **14.3 Transport hazard class(es)** | - | - | - | - |
| **14.4 Packing group** | - | - | - | - |
| **14.5 Environmental hazards** | No. | No. | No. | No. |

**14.6 Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**14.7 Maritime transport in bulk according to IMO instruments** : Not relevant/applicable due to nature of the product.

## SECTION 15: Regulatory information

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

**EU Regulation (EC) No. 1907/2006 (REACH)**

**Annex XIV - List of substances subject to authorisation**

**Annex XIV**

None of the components are listed.

**Substances of very high concern**

None of the components are listed.

**Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles**

| Product/ingredient name | % | Designation [Usage] |
|---|---|---|
| TEKNOSAFE FLAME PROTECT 2458-00 | ≥90 | 3 |
| 2-(2-butoxyethoxy)ethanol | ≤3 | 55 [Consumer paint] |

**Labelling** :

**Other EU regulations**

## SECTION 15: Regulatory information

**Industrial emissions (integrated pollution prevention and control) - Air** : Not listed

**Industrial emissions (integrated pollution prevention and control) - Water** : Not listed

**Explosive precursors** : Not applicable.

**Ozone depleting substances (EU 2024/590)**

Not listed.

**Prior Informed Consent (PIC) (649/2012/EU)**

Not listed.

**Persistent Organic Pollutants**

Not listed.

**Seveso Directive**

This product is not controlled under the Seveso Directive.

**International regulations**

**Chemical Weapon Convention List Schedules I, II & III Chemicals**

Not listed.

**Montreal Protocol**

Not listed.

**Stockholm Convention on Persistent Organic Pollutants**

Not listed.

**Rotterdam Convention on Prior Informed Consent (PIC)**

Not listed.

**UNECE Aarhus Protocol on POPs and Heavy Metals**

Not listed.

**15.2 Chemical safety assessment** : This product contains substances for which Chemical Safety Assessments are still required.

## SECTION 16: Other information

Indicates information that has changed from previously issued version.

**Abbreviations and acronyms** :
ATE = Acute Toxicity Estimate
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level
EUH statement = CLP-specific Hazard statement
N/A = Not available
PBT = Persistent, Bioaccumulative and Toxic
PNEC = Predicted No Effect Concentration
RRN = REACH Registration Number
SGG = Segregation Group
vPvB = Very Persistent and Very Bioaccumulative

**Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]**

| Classification | Justification |
|---|---|
| Skin Sens. 1, H317 | Calculation method |

**Full text of abbreviated H statements**

## SECTION 16: Other information

| | |
|---|---|
| H301 | Toxic if swallowed. |
| H302 | Harmful if swallowed. |
| H310 | Fatal in contact with skin. |
| H314 | Causes severe skin burns and eye damage. |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H318 | Causes serious eye damage. |
| H319 | Causes serious eye irritation. |
| H330 | Fatal if inhaled. |
| H331 | Toxic if inhaled. |
| H335 | May cause respiratory irritation. |
| H361d | Suspected of damaging the unborn child. |
| H400 | Very toxic to aquatic life. |
| H410 | Very toxic to aquatic life with long lasting effects. |
| H411 | Toxic to aquatic life with long lasting effects. |
| EUH071 | Corrosive to the respiratory tract. |

**Full text of classifications [CLP/GHS]**

| | |
|---|---|
| Acute Tox. 2 | ACUTE TOXICITY - Category 2 |
| Acute Tox. 3 | ACUTE TOXICITY - Category 3 |
| Acute Tox. 4 | ACUTE TOXICITY - Category 4 |
| Aquatic Acute 1 | SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1 |
| Aquatic Chronic 1 | LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1 |
| Aquatic Chronic 2 | LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2 |
| Eye Dam. 1 | SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1 |
| Eye Irrit. 2 | SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2 |
| Repr. 2 | REPRODUCTIVE TOXICITY - Category 2 |
| Skin Corr. 1B | SKIN CORROSION/IRRITATION - Category 1B |
| Skin Corr. 1C | SKIN CORROSION/IRRITATION - Category 1C |
| Skin Irrit. 2 | SKIN CORROSION/IRRITATION - Category 2 |
| Skin Sens. 1 | SKIN SENSITISATION - Category 1 |
| Skin Sens. 1A | SKIN SENSITISATION - Category 1A |
| STOT SE 3 | SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3 |

**Date of issue/ Date of revision** : 22/04/2025

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**Version** : 2



**Notice to reader**

**The information in this SDS is based on the present state of our knowledge and on current laws. The product is not to be used for purposes other than those specified under section 1 without first obtaining written handling instructions. It is always the responsibility of the user to take all necessary steps to fulfil the demands set out in the local rules and legislation. The information in this SDS is meant to be a description of the safety requirements for our product. It is not to be considered a guarantee of the product's properties.**