

**Helmet Visor Anti-Mist**

Date of compilation: 22/12/2022      Revised: 12/10/2023      Version: 2 (Replaced 1)

**SECTION 1: IDENTIFICATION**

- 1.1 Product identifier:** Helmet Visor Anti-Mist
- Other means of identification:**  
Non-applicable
- 1.2 Recommended uses and any restrictions on use or supply:**  
Relevant uses: Multiuse cleaner  
Uses advised against: All uses not specified in this section or in section 7.3
- 1.3 Supplier's details:**  
GARDX INTERNATIONAL LTD  
LAKE HOUSE, 2 PORT WAY, PORT SOLENT,  
PO6 4TY PORTSMOUTH - UNITED KINGDOM  
Phone: +44 (0)1243 376426  
product@gardx.co.uk  
www.gardx.co.uk  
  
GardX New Zealand Limited  
739 Chapel Road,  
Howick,  
Auckland,  
New Zealand 2145  
  
0800 242 739
- 1.4 Emergency phone number:** PC No. 0800 764 766. CNN: 1012486. For 24/7 multilingual advice for spill, leak, fire, exposure or accident, call chemtrec @ +65 3163 8374 or + 64 9 801 0034

**SECTION 2: HAZARD IDENTIFICATION**

- 2.1 Classification of the substance or mixture:**  
**Hazardous Substances (Hazard Classification) Notice 2020.:**  
In accordance with Hazardous Substances (Hazard Classification) Notice 2020, the product is not classified as dangerous.
- 2.2 Label elements, including precautionary statements:**  
**Hazardous Substances (Hazard Classification) Notice 2020.:**  
**Hazard statements:**  
Non-applicable  
**Precautionary statements:**  
P102: Keep out of reach of children.  
P280: Wear protective gloves.  
P333+P313: If skin irritation or rash occurs: Get medical advice/attention.  
P501: Dispose of the contents/containers in accordance with the current legislation on waste treatment  
**Additional labeling:**  
Read label before use
- 2.3 Other hazards which do not result in classification:**  
Non-applicable

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

- 3.1 Substances:**  
Non-applicable
- 3.2 Mixtures:**  
**Chemical description:** Tensoactive/s  
**Components:**  
In accordance with Part B: Concentration cut-offs for ingredients in mixtures for purpose of section 3 of Consolidated Hazardous Substances (Safety Data Sheets) Notice 2017, the product contains:

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#### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS (continued)

| Identification   | Chemical name/Classification   | Concentration |
|------------------|--|---------------|
| CAS: 111-76-2    | <b>2-butoxyethanol</b><br>Acute Tox. 4: H302+H312+H332; Eye Irrit. 2: H319; Skin Irrit. 2: H315 - Warning  | <10 %         |
| CAS: 134180-76-0 | <b>Polyether-modified polysiloxane</b><br>Acute Tox. 4: H332; Aquatic Chronic 3: H412; Eye Irrit. 2: H319 - Warning  | <10 %         |
| CAS: 64-17-5     | <b>ethanol</b><br>Eye Irrit. 2: H319; Flam. Liq. 2: H225 - Danger  | <10 %         |
| CAS: 55965-84-9  | <b>Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)</b><br>Acute Tox. 2: H310+H330; Acute Tox. 3: H301; Aquatic Acute 1: H400; Aquatic Chronic 1: H410; Eye Dam. 1: H318; Skin Corr. 1C: H314; Skin Sens. 1A: H317 - Danger | <10 %         |
| CAS: 1310-73-2   | <b>sodium hydroxide</b><br>Eye Dam. 1: H318; Met. Corr. 1: H290; Skin Corr. 1A: H314 - Danger  | <10 %         |

To obtain more information on the hazards of the substances consult sections 11, 12 and 16.

#### SECTION 4: FIRST-AID MEASURES

##### 4.1 First aid instructions according to each relevant route of exposure;:

The symptoms resulting from intoxication can appear after exposure, therefore, in case of doubt, seek medical attention for direct exposure to the chemical product or persistent discomfort, showing the SDS of this product.

##### By inhalation:

This product is not classified as hazardous through inhalation, however, it is recommended in case of intoxication symptoms to remove the person affected from the area of exposure, provide clean air and keep at rest. Request medical attention if symptoms persist.

##### By skin contact:

This product is not classified as hazardous when in contact with the skin. However, in case of skin contact it is recommended to remove contaminated clothes and shoes, rinse the skin or shower the person affected if necessary thoroughly with cold water and neutral soap. In case of serious reaction consult a doctor.

##### By eye contact:

Rinse eyes thoroughly with water for at least 15 minutes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, as this could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS of the product.

##### By ingestion/aspiration:

Do not induce vomiting, but if it does happen keep the head down to avoid aspiration. Keep the person affected at rest. Rinse out the mouth and throat, as they may have been affected during ingestion.

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

Acute and delayed effects are indicated in sections 2 and 11.

##### 4.3 Indication of medical attention and its urgency:

Non-applicable

#### SECTION 5: FIRE-FIGHTING MEASURES

##### 5.1 Information on the appropriate type of extinguishers or fire-fighting agents:

##### Appropriate type of extinguishers or fire-fighting agents:

Product is non-flammable under normal conditions of storage, manipulation and use, but the product contains flammable substances. In the case of inflammation as a result of improper manipulation, storage or use preferably use polyvalent powder extinguishers (ABC powder), in accordance with the Regulation on fire protection systems.

##### Inappropriate type of extinguishers or fire-fighting agents:

IT IS RECOMMENDED NOT to use full jet water as an extinguishing agent.

##### 5.2 Advice on specific hazards that may arise from the substance:

As a result of combustion or thermal decomposition reactive sub-products are created that can become highly toxic and, consequently, can present a serious health risk.

##### 5.3 Special protective equipment and precautions for fire-fighters:

Depending on the magnitude of the fire it may be necessary to use full protective clothing and individual respiratory equipment. Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...)

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**SECTION 5: FIRE-FIGHTING MEASURES (continued)****Additional provisions:**

Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. Destroy any source of ignition. In case of fire, refrigerate the storage containers and tanks for products susceptible to inflammation, explosion or BLEVE as a result of high temperatures. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

**SECTION 6: ACCIDENTAL RELEASE MEASURES****6.1 Personal precautions, protective equipment and emergency procedures:****For non-emergency personnel:**

Isolate leaks provided that there is no additional risk for the people performing this task. Evacuate the area and keep out those without protection. Personal protection equipment must be used against potential contact with the spilt product (See section 8). Above all prevent the formation of any vapour-air flammable mixtures, through either ventilation or the use of an inert medium. Remove any source of ignition. Eliminate electrostatic charges by interconnecting all the conductive surfaces on which static electricity could form, and also ensuring that all surfaces are connected to the ground.

**For emergency responders:**

Wear protective equipment. Keep unprotected persons away. See section 8.

**6.2 Environmental precautions from accidental spills and release::**

It is recommended to avoid environmental spillage of both the product and its container.

**6.3 Advice on how to contain and clean up a spill or release:**

It is recommended:

Absorb the spillage using sand or inert absorbent and move it to a safe place. Do not absorb in sawdust or other combustible absorbents. For any concern related to disposal consult section 13.

**6.4 Reference to other sections:**

See sections 8 and 13.

**SECTION 7: HANDLING AND STORAGE****7.1 Precautions for safe handling:****A.- General precautions for safe use**

Comply with the current legislation concerning the prevention of industrial risks with regards manually handling weights. Maintain order, cleanliness and dispose of using safe methods (section 6).

**B.- Technical recommendations for the prevention of fires and explosions**

Avoid the evaporation of the product as it contains flammable substances, which could form flammable vapour/air mixtures in the presence of sources of ignition. Control sources of ignition (mobile phones, sparks,...) and transfer at slow speeds to avoid the creation of electrostatic charges. Consult section 10 for conditions and materials that should be avoided.

**C.- Technical recommendations on general occupational hygiene**

Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

**D.- Technical recommendations to prevent environmental risks**

It is recommended to have absorbent material available at close proximity to the product (See subsection 6.3)

**7.2 Conditions for safe storage, including any incompatibilities:****A.- Technical measures for storage**

Minimum Temp.: 4 °C

Maximum Temp.: 40 °C

**B.- General conditions for storage**

Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5

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

Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

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#### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

##### 8.1 Occupational exposure limits:

Substances whose workplace exposure standards (WES) have to be monitored in the work environment:

Workplace exposure standards (WES) and biological exposure indices, Edition 12-1:

| Identification                     | Occupational exposure limits |          |                        |
|------------------------------------|------------------------------|----------|------------------------|
| 2-butoxyethanol<br>CAS: 111-76-2   | TWA                          | 25 ppm   | 121 mg/m <sup>3</sup>  |
|                                    | STEL                         |          |                        |
| Copper dinitrate<br>CAS: 3251-23-8 | TWA                          |          | 0.01 mg/m <sup>3</sup> |
|                                    | STEL                         |          |                        |
| sodium hydroxide<br>CAS: 1310-73-2 | TWA                          |          |                        |
|                                    | STEL                         |          | 2 mg/m <sup>3</sup>    |
| ethanol<br>CAS: 64-17-5            | TWA                          | 1000 ppm | 1880 mg/m <sup>3</sup> |
|                                    | STEL                         |          |                        |

##### 8.2 Engineering controls:

###### A.- Identification of the specific types of personal protective equipment



As a preventative measure it is recommended to use basic Personal Protection Equipment. For more information on Personal Protection Equipment (storage, use, cleaning, maintenance, class of protection,...) consult the information leaflet provided by the manufacturer. For more information see subsection 7.1.

All information contained herein is a recommendation which needs some specification from the labour risk prevention services as it is not known whether the company has additional measures at its disposal.

###### B.- Respiratory protection


The use of protection equipment will be necessary if a mist forms or if the occupational exposure limits are exceeded.

###### C.- Specific protection for the hands

| Pictogram  | PPE  | Remarks  |
|--|--|--|
| <br>Mandatory hand protection | Protective gloves against minor risks (Material: Latex (natural rubber), Breakthrough time: > 480 min, Thickness: 0.062 mm, Conditions of use: Normal) | Replace gloves in case of any sign of damage. For prolonged periods of exposure to the product for professional users/industrials, we recommend using chemical protection gloves |
| <br>Mandatory hand protection | Protective gloves against minor risks (Material: Nitrile, Breakthrough time: > 480 min, Thickness: 0.062 mm, Conditions of use: Normal)                | Replace gloves in case of any sign of damage. For prolonged periods of exposure to the product for professional users/industrials, we recommend using chemical protection gloves |

As the product is a mixture of several substances, the resistance of the glove material can not be calculated in advance with total reliability and has therefore to be checked prior to the application.

###### D.- Eye and face protection

| Pictogram  | PPE   | Remarks   |
|--|---|---|
| <br>Mandatory face protection | Panoramic glasses against splash/projections. | Clean daily and disinfect periodically according to the manufacturer's instructions. Use if there is a risk of splashing. |

###### E.- Bodily protection

| Pictogram | PPE                  | Remarks                                       |
|-----------|----------------------|---|
|           | Work clothing        | Replace before any evidence of deterioration. |
|           | Anti-slip work shoes | Replace before any evidence of deterioration. |



###### F.- Additional emergency measures

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#### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

| Emergency measure   | Standards                                       | Emergency measure  | Standards                                      |
|---|---|--|--|
| <br>Emergency shower | ANSI Z358-1<br>ISO 3864-1:2011, ISO 3864-4:2011 | <br>Eyewash stations | DIN 12 899<br>ISO 3864-1:2011, ISO 3864-4:2011 |

#### Environmental exposure controls:

In accordance with the community legislation for the protection of the environment it is recommended to avoid environmental spillage of both the product and its container. For additional information see subsection 7.1.D

#### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

##### 9.1 Information on basic physical and chemical properties:

#### Appearance:

|                          |                  |
|--------------------------|------------------|
| Physical state at 20 °C: | Liquid           |
| Appearance:              | Transparent      |
| Colour:                  | Colourless       |
| Odour:                   | Characteristic   |
| Odour threshold:         | Non-applicable * |

#### Volatility:

|  |                         |
|--|-------------------------|
| Initial boiling point and boiling range: | 103 °C                  |
| Vapour pressure at 20 °C:                | 2322 Pa                 |
| Vapour pressure at 50 °C:                | 12235.13 Pa (12.24 kPa) |
| Evaporation rate at 20 °C:               | Non-applicable *        |

#### Product description:

|  |                      |
|--|----------------------|
| Density at 20 °C:                            | Non-applicable *     |
| Relative density at 20 °C:                   | 0.985 - 0.995        |
| Dynamic viscosity at 20 °C:                  | Non-applicable *     |
| Kinematic viscosity at 20 °C:                | Non-applicable *     |
| Kinematic viscosity at 40 °C:                | Non-applicable *     |
| Concentration:                               | Non-applicable *     |
| pH:  | 4.5 - 6.5 (at 100 %) |
| Vapour density at 20 °C:                     | Non-applicable *     |
| Partition coefficient n-octanol/water 20 °C: | Non-applicable *     |
| Solubility in water at 20 °C:                | Non-applicable *     |
| Solubility properties:                       | Highly water-soluble |
| Decomposition temperature:                   | Non-applicable *     |
| Melting point/freezing point:                | Non-applicable *     |

#### Flammability:

|                            |                        |
|----------------------------|------------------------|
| Flash Point:               | Non Flammable (>93 °C) |
| Flammability (solid, gas): | Non-applicable *       |
| Autoignition temperature:  | Non-applicable *       |
| Lower flammability limit:  | Non-applicable *       |
| Upper flammability limit:  | Non-applicable *       |

#### Particle characteristics:

|                             |                |
|-----------------------------|----------------|
| Median equivalent diameter: | Non-applicable |
|-----------------------------|----------------|

##### 9.2 Other information:

\*Not relevant due to the nature of the product, not providing information property of its hazards.

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### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continued)

**Information with regard to physical hazard classes:**

|  |                  |
|--|------------------|
| Explosive properties:  | Non-applicable * |
| Oxidising properties:  | Non-applicable * |
| Corrosive to metals:   | Non-applicable * |
| Heat of combustion:  | Non-applicable * |
| Aerosols-total percentage (by mass) of flammable components: | Non-applicable * |
| <b>Other safety characteristics:</b>                         |                  |
| Surface tension at 20 °C:                                    | Non-applicable * |
| Refraction index:  | Non-applicable * |

\*Not relevant due to the nature of the product, not providing information property of its hazards.

### SECTION 10: STABILITY AND REACTIVITY

**10.1 Chemical reactivity:**

No hazardous reactions are expected because the product is stable under recommended storage conditions. See section 7 from Safety Data Sheet.

**10.2 Chemical stability:**

Chemically stable under the indicated conditions of storage, handling and use.

**10.3 Possibility of hazardous reactions:**

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

**10.4 List of conditions to avoid or prevent a hazardous situation:**

Applicable for handling and storage at room temperature:

| Shock and friction | Contact with air | Increase in temperature | Sunlight   | Humidity       |
|--------------------|------------------|-------------------------|------------|----------------|
| Not applicable     | Not applicable   | Precaution              | Precaution | Not applicable |

**10.5 Information on incompatible substances or materials:**

| Acids              | Water          | Oxidising materials | Combustible materials | Others                        |
|--------------------|----------------|---------------------|-----------------------|-------------------------------|
| Avoid strong acids | Not applicable | Avoid direct impact | Not applicable        | Avoid alkalis or strong bases |

**10.6 Information on hazardous decomposition products:**

See subsection 10.3, 10.4 and 10.5 to find out the specific decomposition products. Depending on the decomposition conditions, complex mixtures of chemical substances can be released: carbon dioxide (CO<sub>2</sub>), carbon monoxide and other organic compounds.

### SECTION 11: TOXICOLOGICAL INFORMATION

**11.1 Information on toxicological effects:**

The experimental information related to the toxicological properties of the product itself is not available

Contains glycols. With possibility of effects that are hazardous to the health, it is recommended not to breathe the vapours for long periods of time.

**Dangerous health implications:**

In case of exposure that is repetitive, prolonged or at concentrations higher than recommended by the occupational exposure limits, it may result in adverse effects on health depending on the means of exposure:

A- Ingestion (acute effect):

- Acute toxicity: Based on available data, the classification criteria are not met, however, it contains substances classified as dangerous for consumption. For more information see section 3.
- Corrosivity/Irritability: Based on available data, the classification criteria are not met. However, it does contain substances classified as hazardous for this effect. For more information see section 3.

B- Inhalation (acute effect):

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#### SECTION 11: TOXICOLOGICAL INFORMATION (continued)

- Acute toxicity : Based on available data, the classification criteria are not met. However, it contains substances classified as hazardous for inhalation. For more information see section 3.
- Corrosivity/Irritability: Based on available data, the classification criteria are not met. However, it does contain substances classified as hazardous for this effect. For more information see section 3.
- C- Contact with the skin and the eyes (acute effect):
  - Contact with the skin: Based on available data, the classification criteria are not met. However, it contains substances classified as hazardous for skin contact. For more information see section 3.
  - Contact with the eyes: Based on available data, the classification criteria are not met. However, it does contain substances classified as hazardous for this effect. For more information see section 3.
- D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):
  - Carcinogenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for the effects mentioned. For more information see section 3.
  - Mutagenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.
  - Reproductive toxicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.
- E- Sensitizing effects:
  - Respiratory: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous with sensitising effects. For more information see section 3.
  - Skin: Based on available data, the classification criteria are not met, however, it contains substances classified as dangerous with sensitising effects. For more information see section 3.
- F- Specific target organ toxicity (STOT) - single exposure:
 

Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.
- G- Specific target organ toxicity (STOT)-repeated exposure:
  - Specific target organ toxicity (STOT)-repeated exposure: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.
  - Skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.
- H- Aspiration hazard:
 

Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

**Other information:**

Non-applicable

**Specific toxicology information on the substances:**

| Identification   | Acute toxicity  |                   | Genus  |
|--|-----------------|-------------------|--------|
| 2-butoxyethanol<br>CAS: 111-76-2   | LD50 oral       | 1200 mg/kg (ATEi) | Rat    |
|  | LD50 dermal     | 3000 mg/kg        | Rabbit |
|  | LC50 inhalation | 3 mg/L (ATEi)     |        |
| Polyether-modified polysiloxane<br>CAS: 134180-76-0  | LD50 oral       | Non-applicable    |        |
|  | LD50 dermal     | 15550 mg/kg       | Rabbit |
|  | LC50 inhalation | Non-applicable    |        |
| ethanol<br>CAS: 64-17-5  | LD50 oral       | 6200 mg/kg        | Rat    |
|  | LD50 dermal     | 20000 mg/kg       | Rabbit |
|  | LC50 inhalation | 124.7 mg/L (4 h)  | Rat    |
| 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 | LD50 oral       | 64 mg/kg          | Rat    |
|  | LD50 dermal     | 87.12 mg/kg       | Rabbit |
|  | LC50 inhalation | 0.33 mg/L (4 h)   | Rat    |
| sodium hydroxide<br>CAS: 1310-73-2   | LD50 oral       | >2000 mg/kg       |        |
|  | LD50 dermal     | Non-applicable    |        |
|  | LC50 inhalation | Non-applicable    |        |

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## SECTION 12: ECOLOGICAL INFORMATION

The experimental information related to the eco-toxicological properties of the product itself is not available

Based on available data, the classification criteria are not met. However, it does contain substances classified as hazardous for this effect. For more information see section 3.

### 12.1 Ecotoxicity (aquatic and terrestrial):

#### Acute toxicity:

| Identification   | Concentration |                      | Species                | Genus      |
|--|---------------|----------------------|------------------------|------------|
| Polyether-modified polysiloxane<br>CAS: 134180-76-0  | LC50          | 2.1 mg/L (96 h)      | Oncorhynchus mykiss    | Fish       |
|  | EC50          | 1.1 mg/L (48 h)      | Daphnia magna          | Crustacean |
|  | EC50          | Non-applicable       |                        |            |
| ethanol<br>CAS: 64-17-5  | LC50          | 11000 mg/L (96 h)    | Alburnus alburnus      | Fish       |
|  | EC50          | 9268 mg/L (48 h)     | Daphnia magna          | Crustacean |
|  | EC50          | 1450 mg/L (192 h)    | Microcystis aeruginosa | Algae      |
| 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 | LC50          | >0.1 - 1 mg/L (96 h) |                        | Fish       |
|  | EC50          | >0.1 - 1 mg/L (48 h) |                        | Crustacean |
|  | EC50          | >0.1 - 1 mg/L (72 h) |                        | Algae      |
| sodium hydroxide<br>CAS: 1310-73-2   | LC50          | 189 mg/L (48 h)      | Leuciscus idus         | Fish       |
|  | EC50          | 33 mg/L              | Crangon crangon        | Crustacean |
|  | EC50          | Non-applicable       |                        |            |

#### Chronic toxicity:

| Identification                   | Concentration |          | Species            | Genus      |
|----------------------------------|---------------|----------|--------------------|------------|
| 2-butoxyethanol<br>CAS: 111-76-2 | NOEC          | 100 mg/L | Danio rerio        | Fish       |
|                                  | NOEC          | 100 mg/L | Daphnia magna      | Crustacean |
| ethanol<br>CAS: 64-17-5          | NOEC          | 250 mg/L | Danio rerio        | Fish       |
|                                  | NOEC          | 2 mg/L   | Ceriodaphnia dubia | Crustacean |

### 12.2 Persistence and degradability:

#### Substance-specific information:

| Identification                   | Degradability |                | Biodegradability |          |
|----------------------------------|---------------|----------------|------------------|----------|
| 2-butoxyethanol<br>CAS: 111-76-2 | BOD5          | 0.71 g O2/g    | Concentration    | 100 mg/L |
|                                  | COD           | 2.2 g O2/g     | Period           | 14 days  |
|                                  | BOD5/COD      | 0.32           | % Biodegradable  | 96 %     |
| ethanol<br>CAS: 64-17-5          | BOD5          | Non-applicable | Concentration    | 100 mg/L |
|                                  | COD           | Non-applicable | Period           | 14 days  |
|                                  | BOD5/COD      | Non-applicable | % Biodegradable  | 89 %     |

### 12.3 Potential to be bioaccumulative:

#### Substance-specific information:

| Identification                   |           | Bioaccumulation potential |  |
|----------------------------------|-----------|---------------------------|--|
| 2-butoxyethanol<br>CAS: 111-76-2 | BCF       | 3                         |  |
|                                  | Pow Log   | 0.83                      |  |
|                                  | Potential | Low                       |  |
| ethanol<br>CAS: 64-17-5          | BCF       | 3                         |  |
|                                  | Pow Log   | -0.31                     |  |
|                                  | Potential | Low                       |  |

### 12.4 Mobility in soil:

| Identification                   | Absorption/desorption |                      | Volatility |                    |
|----------------------------------|-----------------------|----------------------|------------|--------------------|
| 2-butoxyethanol<br>CAS: 111-76-2 | Koc                   | 8                    | Henry      | 1.621E-1 Pa·m³/mol |
|                                  | Conclusion            | Very High            | Dry soil   | No                 |
|                                  | Surface tension       | 2.729E-2 N/m (25 °C) | Moist soil | Yes                |
| ethanol<br>CAS: 64-17-5          | Koc                   | 1                    | Henry      | 4.61E-1 Pa·m³/mol  |
|                                  | Conclusion            | Very High            | Dry soil   | Yes                |
|                                  | Surface tension       | 2.339E-2 N/m (25 °C) | Moist soil | Yes                |

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**SECTION 12: ECOLOGICAL INFORMATION (continued)****12.5 Results of PBT and vPvB assessment:**

Non-applicable

**12.6 Other adverse effects:**

Not described

**SECTION 13: DISPOSAL CONSIDERATIONS****13.1 Appropriate and achievable disposal methods:****Special precautions to be taken during disposal:**

Consult the authorized waste service manager on the assessment and disposal operations. In case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-dangerous residue. Waste should not be disposed of to drains. See epigraph 6.2.

**Regulations related to waste management:**

Legislation related to waste management:

Consolidated Imports and Exports (Restrictions) Prohibition Order (No 2) 2004

Consolidated Hazardous Substances (Disposal) Notice 2017

**SECTION 14: TRANSPORT INFORMATION**

This product is not regulated for transport.

**SECTION 15: REGULATORY INFORMATION****15.1 Safety, health and environmental regulations specific for the product in question:**

- Substances listed in the Montreal Protocol: Non-applicable
- Substances listed in the Rotterdam Convention: Non-applicable
- Substances listed in the Stockholm Convention: Non-applicable

**Specific provisions in terms of protecting people or the environment:**

It is recommended to use the information included in this safety data sheet as data used in a risk evaluation of the local circumstances in order to establish the necessary risk prevention measures for the manipulation, use, storage and disposal of this product.

**Relevant regulatory requirements:**

Health and Safety at Work (Hazardous Substances) Regulations 2017

Health and Safety at Work Act 2015

Consolidated Hazardous Substances (Labelling) Notice 2017

Consolidated Hazardous Substances (Packaging) Notice 2017

Consolidated Hazardous Substances (Hazardous Property Controls) Notice 2017

Consolidated Hazardous Substances (Importers and Manufacturers) Notice 2015

**SECTION 16: OTHER INFORMATION****Legislation related to safety data sheets:**

This safety data sheet has been designed in accordance with Schedule: Content and format of safety data sheets (clause 7) of Consolidated Hazardous Substances (Safety Data Sheets) Notice 2017

**Texts of the legislative phrases mentioned in section 3:**

The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3

**Hazardous Substances (Hazard Classification) Notice 2020.:**

CONTINUED ON NEXT PAGE

**Helmet Visor Anti-Mist**

Date of compilation: 22/12/2022      Revised: 12/10/2023      Version: 2 (Replaced 1)

**SECTION 16: OTHER INFORMATION (continued)**

Acute Tox. 2: H310+H330 - Fatal in contact with skin or if inhaled.  
Acute Tox. 3: H301 - Toxic if swallowed.  
Acute Tox. 4: H302+H312+H332 - Harmful if swallowed, in contact with skin or if inhaled.  
Acute Tox. 4: H332 - Harmful if inhaled.  
Aquatic Acute 1: H400 - Very toxic to aquatic life.  
Aquatic Chronic 1: H410 - Very toxic to aquatic life with long lasting effects.  
Aquatic Chronic 3: H412 - Harmful to aquatic life with long lasting effects.  
Eye Dam. 1: H318 - Causes serious eye damage.  
Eye Irrit. 2: H319 - Causes serious eye irritation.  
Flam. Liq. 2: H225 - Highly flammable liquid and vapour.  
Met. Corr. 1: H290 - May be corrosive to metals.  
Skin Corr. 1A: H314 - Causes severe skin burns and eye damage.  
Skin Corr. 1C: H314 - Causes severe skin burns and eye damage.  
Skin Irrit. 2: H315 - Causes skin irritation.  
Skin Sens. 1A: H317 - May cause an allergic skin reaction.

**Advice related to training:**

Minimal training is recommended to prevent industrial risks for staff using this product, in order to facilitate their comprehension and interpretation of this safety data sheet, as well as the label on the product.

**Principal bibliographical sources:**

<https://www.epa.govt.nz/>

**Abbreviations and acronyms:**

HSNO Act: Hazardous substances and new organisms Act  
IMDG: International maritime dangerous goods code  
IATA: International Air Transport Association  
ICAO: International Civil Aviation Organisation  
COD: Chemical Oxygen Demand  
BOD5: 5-day biochemical oxygen demand  
BCF: Bioconcentration factor  
LD50: Lethal Dose 50  
CL50: Lethal Concentration 50  
EC50: Effective concentration 50  
Log-POW: Octanol-water partition coefficient  
Koc: Partition coefficient of organic carbon  
IARC: International Agency for Research on Cancer

The information contained in this safety data sheet is based on sources, technical knowledge and current legislation, without being able to guarantee its accuracy. This information cannot be considered a guarantee of the properties of the product, it is simply a description of the security requirements. The occupational methodology and conditions for users of this product are not within our awareness or control, and it is ultimately the responsibility of the user to take the necessary measures to obtain the legal requirements concerning the manipulation, storage, use and disposal of chemical products. The information on this safety data sheet only refers to this product, which should not be used for needs other than those specified.

END OF SAFETY DATA SHEET