




## SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

- 1.1 Product identifier:** PERFECTOSE
- 1.2 Relevant identified uses of the substance or mixture and uses advised against:**  
Relevant uses: Fertilizer  
Uses advised against: All uses not specified in this section or in section 7.3
- 1.3 Details of the supplier of the safety data sheet:**  
Sipcam Inagra S.A.  
C\ Profesor Beltrán Baguena Nº 5  
46009 Valencia - Valencia - Spain  
Phone: +34 963483500 - Fax: +34 963482721  
sipcaminagra@sipcam.es  
www.sipcam.es
- 1.4 Emergency telephone number:** Europe: +44 1273 289451 (English, Dutch, French, German, Italian, Spanish)  
Global: +44 1865 407333 (English)

## SECTION 2: HAZARDS IDENTIFICATION \*\*

- 2.1 Classification of the substance or mixture:**  
**CLP Regulation (EC) No 1272/2008:**  
Classification of this product has been carried out in accordance with CLP Regulation (EC) No 1272/2008.  
Aquatic Chronic 3: Hazardous to the aquatic environment, long-term hazard, Category 3, H412  
Skin Sens. 1A: Sensitisation, skin, Category 1A, H317
- 2.2 Label elements:**  
**CLP Regulation (EC) No 1272/2008:**  
**Warning**  
  
**Hazard statements:**  
Aquatic Chronic 3: H412 - Harmful to aquatic life with long lasting effects.  
Skin Sens. 1A: H317 - May cause an allergic skin reaction.  
**Precautionary statements:**  
P101: If medical advice is needed, have product container or label at hand.  
P102: Keep out of reach of children.  
P261: Avoid breathing dust/fume/gas/mist/vapours/spray.  
P270: Do not eat, drink or smoke when using this product.  
P272: Contaminated work clothing should not be allowed out of the workplace.  
P273: Avoid release to the environment.  
P280: Wear protective gloves, protective clothing, respiratory protection and eye protection.  
P302+P352: IF ON SKIN: Wash with plenty of water.  
P333+P313: If skin irritation or rash occurs: Get medical advice/attention.  
P501: Dispose of contents/container according to the separated collection system used in your municipality.  
**Substances that contribute to the classification**  
2-methylisothiazol-3(2H)-one (CAS: 2682-20-4); othilinone (ISO) (CAS: 26530-20-1)
- 2.3 Other hazards:**  
Product fails to meet PBT/vPvB criteria  
Endocrine-disrupting properties: The product fails to meet the criteria.

\*\* Changes with regards to the previous version

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

- 3.1 Substance:**

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

Non-applicable

#### 3.2 Mixture:

**Chemical description:** Mixture of substances

**Components:**

In accordance with Annex II of Regulation (EC) No 1907/2006 (point 3), the product contains:

Identification	Chemical name/Classification	Concentration
CAS: 112-34-5 EC: 203-961-6 Index: 603-096-00-8 REACH: 01-2119475104-44-XXXX	<b>2-(2-butoxyethoxy)ethanol<sup>(1)</sup></b> ATP CLP00  Regulation 1272/2008 Eye Irrit. 2: H319 - Warning	<b>0,01 - &lt;0,1 %</b>
CAS: 2682-20-4 EC: 220-239-6 Index: 613-326-00-9 REACH: 01-2120764690-50-XXXX	<b>2-methylisothiazol-3(2H)-one<sup>(2)</sup></b> ATP ATP13  Regulation 1272/2008 Acute Tox. 2: H330; Acute Tox. 3: H301+H311; Aquatic Acute 1: H400; Aquatic Chronic 1: H410; Eye Dam. 1: H318; Skin Corr. 1B: H314; Skin Sens. 1A: H317; EUH071 - Danger	<b>&lt;0,01 %</b>
CAS: 26530-20-1 EC: 247-761-7 Index: 613-112-00-5 REACH: 01-2120768921-45-XXXX	<b>octhilinone (ISO)<sup>(2)</sup></b> ATP ATP15  Regulation 1272/2008 Acute Tox. 2: H330; Acute Tox. 3: H301+H311; Aquatic Acute 1: H400; Aquatic Chronic 1: H410; Eye Dam. 1: H318; Skin Corr. 1: H314; Skin Sens. 1A: H317; EUH071 - Danger	<b>&lt;0,01 %</b>

<sup>(1)</sup> Substance with a Union workplace exposure limit

<sup>(2)</sup> Substances presenting a health or environmental hazard which meet criteria laid down in Regulation (EU) No. 2020/878

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

**Other information:**

Identification	M-factor	
2-methylisothiazol-3(2H)-one CAS: 2682-20-4 EC: 220-239-6	Acute	10
	Chronic	1
octhilinone (ISO) CAS: 26530-20-1 EC: 247-761-7	Acute	100
	Chronic	100

Identification	Specific concentration limit
2-methylisothiazol-3(2H)-one CAS: 2682-20-4 EC: 220-239-6	% (w/w) >=0,0015: Skin Sens. 1A - H317
octhilinone (ISO) CAS: 26530-20-1 EC: 247-761-7	% (w/w) >=0,0015: Skin Sens. 1A - H317

### SECTION 4: FIRST AID MEASURES

#### 4.1 Description of first aid measures:

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, in case of intoxication symptoms it is recommended 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:**

May cause an allergic skin reaction. In case of contact it is recommended to clean the affected area thoroughly with water and neutral soap. In case of changes to the skin (stinging, redness, rashes, blisters,...), seek medical advice with this Safety data Sheet

**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, in which case removal could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS for 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.

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#### SECTION 4: FIRST AID MEASURES (continued)

**4.2 Most important symptoms and effects, both acute and delayed:**

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

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

Non-applicable

#### SECTION 5: FIREFIGHTING MEASURES

**5.1 Extinguishing media:**

**Suitable extinguishing media:**

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

**Unsuitable extinguishing media:**

Non-applicable

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

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 Advice for firefighters:**

Depending on the magnitude of the fire it may be necessary to use full protective clothing and self-contained breathing apparatus (SCBA). Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...) in accordance with Directive 89/654/EC.

**Additional provisions:**

Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. Eliminate all sources of ignition. In case of fire, cool the storage containers and tanks for products susceptible to combustion, 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. Personal protection equipment must be used against potential contact with the spilled product (See section 8). Evacuate the area and keep out those who do not have protection.

**For emergency responders:**

See section 8.

**6.2 Environmental precautions:**

Avoid at all cost any type of spillage into an aqueous medium. Contain the product absorbed appropriately in hermetically sealed containers. Notify the relevant authority in case of exposure to the general public or the environment.

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

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

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## SECTION 7: HANDLING AND STORAGE (continued)

Comply with the current legislation concerning the prevention of industrial risks. Keep containers hermetically sealed. Control spills and residues, destroying them with safe methods (section 6). Avoid leakages from the container. Maintain order and cleanliness where dangerous products are used.

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

Product is non-flammable under normal conditions of storage, handling and use. It is recommended to transfer at slow speeds to avoid the generation of electrostatic charges that can affect flammable products. Consult section 10 for information on 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**

Due to the danger of this product for the environment it is recommended to use it within an area containing contamination control barriers in case of spillage, as well as having absorbent material in close proximity.

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

**A.- Technical measures for storage**

Store in a cool, dry, well-ventilated location

**B.- General conditions for storage**

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

**Other information:**

Store the product in its original closed container at temperatures between 4°C and 40°C.

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

Fertilizer

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

**8.1 Control parameters:**

Substances whose occupational exposure limits have to be monitored in the workplace (European OEL, not country-specific legislation):

Directive (EU) 2000/39, Directive 2004/37/EC, Directive (EU) 2006/15, Directive (EU) 2009/161, Directive (EU) 2017/164, Directive (EU) 2019/1831:

Identification	Occupational exposure limits		
	IOELV (8h)	10 ppm	67,5 mg/m <sup>3</sup>
2-(2-butoxyethoxy)ethanol CAS: 112-34-5 EC: 203-961-6	IOELV (STEL)	15 ppm	101,2 mg/m <sup>3</sup>

**DNEL (Workers):**

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
2-(2-butoxyethoxy)ethanol CAS: 112-34-5 EC: 203-961-6	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	83 mg/kg	Non-applicable
	Inhalation	Non-applicable	101,2 mg/m <sup>3</sup>	67,5 mg/m <sup>3</sup>	67,5 mg/m <sup>3</sup>
2-methylisothiazol-3(2H)-one CAS: 2682-20-4 EC: 220-239-6	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Inhalation	Non-applicable	0,043 mg/m <sup>3</sup>	Non-applicable	0,021 mg/m <sup>3</sup>

**DNEL (General population):**

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
2-(2-butoxyethoxy)ethanol CAS: 112-34-5 EC: 203-961-6	Oral	Non-applicable	Non-applicable	5 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	50 mg/kg	Non-applicable
	Inhalation	Non-applicable	60,7 mg/m <sup>3</sup>	40,5 mg/m <sup>3</sup>	40,5 mg/m <sup>3</sup>
2-methylisothiazol-3(2H)-one CAS: 2682-20-4 EC: 220-239-6	Oral	0,053 mg/kg	Non-applicable	0,027 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Inhalation	Non-applicable	0,043 mg/m <sup>3</sup>	Non-applicable	0,021 mg/m <sup>3</sup>

**PNEC:**

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**PERFECTOSE**

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



Identification				
2-(2-butoxyethoxy)ethanol CAS: 112-34-5 EC: 203-961-6	STP	200 mg/L	Fresh water	1,1 mg/L
	Soil	0,32 mg/kg	Marine water	0,11 mg/L
	Intermittent	11 mg/L	Sediment (Fresh water)	4,4 mg/kg
	Oral	0,056 g/kg	Sediment (Marine water)	0,44 mg/kg
2-methylisothiazol-3(2H)-one CAS: 2682-20-4 EC: 220-239-6	STP	0,23 mg/L	Fresh water	0,00339 mg/L
	Soil	0,047 mg/kg	Marine water	0,00339 mg/L
	Intermittent	0,00339 mg/L	Sediment (Fresh water)	Non-applicable
	Oral	Non-applicable	Sediment (Marine water)	Non-applicable
octhilinone (ISO) CAS: 26530-20-1 EC: 247-761-7	STP	Non-applicable	Fresh water	0,0022 mg/L
	Soil	0,0082 mg/kg	Marine water	0,00022 mg/L
	Intermittent	0,00122 mg/L	Sediment (Fresh water)	0,0475 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0,00475 mg/kg

**8.2 Exposure controls:**



**A.- Individual protection measures, such as personal protective equipment**

As a preventative measure it is recommended to use basic Personal Protective Equipment, with the corresponding <<CE marking>> in accordance with Regulation (EU) 2016/425. For more information on Personal Protective 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**



Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory respiratory tract protection	Filter mask for gases and vapours		EN 405:2002+A1:2010	Replace when there is a taste or smell of the contaminant inside the face mask. If the contaminant comes with warnings it is recommended to use isolation equipment.

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



Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory hand protection	Protective gloves against minor risks			Replace gloves in case of any sign of damage. For prolonged periods of exposure to the product for professional users/industrials, we recommend using CE III gloves in line with standards EN 420:2004+A1:2010 and EN ISO 374-1:2016+A1:2018

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	Labelling	CEN Standard	Remarks
 Mandatory face protection	Panoramic glasses against splash/projections.		EN 166:2002 EN ISO 4007:2018	Clean daily and disinfect periodically according to the manufacturer's instructions. Use if there is a risk of splashing.

**E.- Body protection**



Pictogram	PPE	Labelling	CEN Standard	Remarks
	Work clothing			Replace before any evidence of deterioration. For periods of prolonged exposure to the product for professional/industrial users CE III is recommended, in accordance with the regulations in EN ISO 6529:2013, EN ISO 6530:2005, EN ISO 13688:2013, EN 464:1994.
	Anti-slip work shoes		EN ISO 20347:2012	Replace before any evidence of deterioration. For periods of prolonged exposure to the product for professional/industrial users CE III is recommended, in accordance with the regulations in EN ISO 20345:2012 y EN 13832-1:2007

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

### F.- Additional emergency measures

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

### Volatile organic compounds:

With regard to Directive 2010/75/EU, this product has the following characteristics:

V.O.C. (Supply):	0 % weight
V.O.C. density at 20 °C:	0,06 kg/m <sup>3</sup> (0,06 g/L)
Average carbon number:	4
Average molecular weight:	115,15 g/mol

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

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

For complete information see the product datasheet.

#### Appearance:

Physical state at 20 °C:	Liquid
Appearance:	Opaque
Colour:	Brown
Odour:	Characteristic
Odour threshold:	Non-applicable *

#### Volatility:

Boiling point at atmospheric pressure:	Non-applicable *
Vapour pressure at 20 °C:	Non-applicable *
Vapour pressure at 50 °C:	Non-applicable *
Evaporation rate at 20 °C:	Non-applicable *

#### Product description:

Density at 20 °C:	1200 - 1215 kg/m <sup>3</sup>
Relative density at 20 °C:	1,2 - 1,215
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:	5,2 - 7,2 (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:	Water miscible
Decomposition temperature:	Non-applicable *
Melting point/freezing point:	Non-applicable *

#### Flammability:

\*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)

Flash Point:	Non Flammable (>60 °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
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**9.2 Other information:**

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

Explosive properties:	Not explosive
Oxidising properties:	Not oxidising
Corrosive to metals:	Non-applicable *
Heat of combustion:	Non-applicable *
Aerosols-total percentage (by mass) of flammable components:	Non-applicable *

**Other safety characteristics:**

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 Reactivity:**

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

**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 Conditions to avoid:**

Applicable for handling and storage at room temperature:

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

**10.5 Incompatible 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 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 hazard classes as defined in Regulation (EC) No 1272/2008:**

Contains glycols. It is recommended not to breathe the vapours for prolonged periods of time due to the possibility of effects that are hazardous to the health.

**Dangerous health implications:**

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

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**PERFECTOSE**

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

**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):**

- 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: Prolonged inhalation of the product is corrosive to mucous membranes and the upper respiratory tract

**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.  
IARC: Non-applicable
- 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: Prolonged contact with the skin can result in episodes of allergic contact dermatitis.

**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
	LD50 oral	LD50 dermal	
2-(2-butoxyethoxy)ethanol CAS: 112-34-5 EC: 203-961-6	LD50 oral	>2000 mg/kg	
	LD50 dermal	>2000 mg/kg	
	LC50 inhalation	>20 mg/L	
2-methylisothiazol-3(2H)-one CAS: 2682-20-4 EC: 220-239-6	LD50 oral	120 mg/kg	Rat
	LD50 dermal	242 mg/kg	Rat
	LC50 inhalation	>20 mg/L	
octhilinone (ISO) CAS: 26530-20-1 EC: 247-761-7	LD50 oral	125 mg/kg	
	LD50 dermal	311 mg/kg	
	LC50 inhalation	>20 mg/L	

**11.2 Information on other hazards:**

**Endocrine disrupting properties**

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## SECTION 11: TOXICOLOGICAL INFORMATION (continued)

Endocrine-disrupting properties: The product fails to meet the criteria.

**Other information**

Non-applicable

## SECTION 12: ECOLOGICAL INFORMATION

**12.1 Toxicity:**

**Acute toxicity:**

Identification	Concentration		Species	Genus
2-(2-butoxyethoxy)ethanol CAS: 112-34-5 EC: 203-961-6	LC50	1300 mg/L (96 h)	Lepomis macrochirus	Fish
	EC50	2850 mg/L (24 h)	Daphnia magna	Crustacean
	EC50	53 mg/L (192 h)	Microcystis aeruginosa	Algae
2-methylisothiazol-3(2H)-one CAS: 2682-20-4 EC: 220-239-6	LC50	4,77 mg/L (96 h)	Oncorhynchus mykiss	Fish
	EC50	0,934 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	Non-applicable		
octhilinone (ISO) CAS: 26530-20-1 EC: 247-761-7	LC50	>0.1 - 1 (96 h)		Fish
	EC50	>0.1 - 1 (48 h)		Crustacean
	EC50	>0.1 - 1 (72 h)		Algae

**Chronic toxicity:**

Identification	Concentration		Species	Genus
2-methylisothiazol-3(2H)-one CAS: 2682-20-4 EC: 220-239-6	NOEC	4,93 mg/L	Oncorhynchus mykiss	Fish
	NOEC	0,044 mg/L	Daphnia magna	Crustacean

**12.2 Persistence and degradability:**

Identification	Degradability		Biodegradability	
2-(2-butoxyethoxy)ethanol CAS: 112-34-5 EC: 203-961-6	BOD5	0,25 g O2/g	Concentration	100 mg/L
	COD	2,08 g O2/g	Period	28 days
	BOD5/COD	0,12	% Biodegradable	92 %
2-methylisothiazol-3(2H)-one CAS: 2682-20-4 EC: 220-239-6	BOD5	Non-applicable	Concentration	10 mg/L
	COD	Non-applicable	Period	28 days
	BOD5/COD	Non-applicable	% Biodegradable	55,8 %

**12.3 Bioaccumulative potential:**

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## SECTION 12: ECOLOGICAL INFORMATION (continued)

Identification	Bioaccumulation potential	
2-(2-butoxyethoxy)ethanol CAS: 112-34-5 EC: 203-961-6	BCF	0.46
	Pow Log	0.56
	Potential	Low
2-methylisothiazol-3(2H)-one CAS: 2682-20-4 EC: 220-239-6	BCF	
	Pow Log	-0.49
	Potential	

### 12.4 Mobility in soil:

Identification	Absorption/desorption		Volatility	
2-(2-butoxyethoxy)ethanol CAS: 112-34-5 EC: 203-961-6	Koc	48	Henry	7,2E-9 Pa·m <sup>3</sup> /mol
	Conclusion	Very High	Dry soil	No
	Surface tension	3,395E-2 N/m (25 °C)	Moist soil	No
2-methylisothiazol-3(2H)-one CAS: 2682-20-4 EC: 220-239-6	Koc	Non-applicable	Henry	0E+0 Pa·m <sup>3</sup> /mol
	Conclusion	Non-applicable	Dry soil	Non-applicable
	Surface tension	Non-applicable	Moist soil	Non-applicable

### 12.5 Results of PBT and vPvB assessment:

Product fails to meet PBT/vPvB criteria

### 12.6 Endocrine disrupting properties:

Endocrine-disrupting properties: The product fails to meet the criteria.

### 12.7 Other adverse effects:

Not described

## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods:

Code	Description	Waste class (Regulation (EU) No 1357/2014)
06 10 02*	wastes containing hazardous substances	Dangerous

#### Type of waste (Regulation (EU) No 1357/2014):

HP14 Ecotoxic

#### Waste management (disposal and evaluation):

Consult the authorized waste service manager on the assessment and disposal operations in accordance with Annex 1 and Annex 2 (Directive 2008/98/EC). As under 15 01 (2014/955/EC) of the code and 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 paragraph 6.2.

#### Regulations related to waste management:

In accordance with Annex II of Regulation (EC) No 1907/2006 (REACH) the community or state provisions related to waste management are stated

Community legislation: Directive 2008/98/EC, 2014/955/EU, Regulation (EU) No 1357/2014

## SECTION 14: TRANSPORT INFORMATION

This product is not regulated for transport (ADR/RID,IMDG,IATA)

## SECTION 15: REGULATORY INFORMATION

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

Regulation (EC) No 528/2012: contains a preservative to protect the initial properties of the treated article. Contains 1,2-benzisothiazol-3(2H)-one, octhilonone (ISO), 2-methylisothiazol-3(2H)-one.

Candidate substances for authorisation under the Regulation (EC) No 1907/2006 (REACH): Non-applicable

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## SECTION 15: REGULATORY INFORMATION (continued)

Substances included in Annex XIV of REACH ("Authorisation List") and sunset date: Non-applicable

Regulation (EC) No 1005/2009, about substances that deplete the ozone layer: Non-applicable

Article 95, REGULATION (EU) No 528/2012: 2-methylisothiazol-3(2H)-one (Product-type 6, 11, 12, 13) ; octhilonone (ISO) (Product-type 6, 7, 8, 9, 10, 11, 13)

REGULATION (EU) No 649/2012, in relation to the import and export of hazardous chemical products: Non-applicable

### **Seveso III:**

Non-applicable

### **Limitations to commercialisation and the use of certain dangerous substances and mixtures (Annex XVII REACH, etc ....):**

Shall not be used in:

- ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays,
- tricks and jokes,
- games for one or more participants, or any article intended to be used as such, even with ornamental aspects.

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

It is recommended to use the information included in this safety data sheet as a basis for conducting workplace-specific risk assessments in order to establish the necessary risk prevention measures for the handling, use, storage and disposal of this product.

### **Other legislation:**

The product could be affected by sectorial legislation

## **15.2 Chemical safety assessment:**

The supplier has not carried out evaluation of chemical safety.

## SECTION 16: OTHER INFORMATION \*\*

### **Legislation related to safety data sheets:**

The SDS shall be supplied in an official language of the country where the product is placed on the market. This safety data sheet has been designed in accordance with ANNEX II-Guide to the compilation of safety data sheets of Regulation (EC) No 1907/2006 (COMMISSION REGULATION (EU) 2020/878).

### **Modifications related to the previous Safety Data Sheet which concerns the ways of managing risks.:**

COMMISSION REGULATION (EU) 2020/878

CLP Regulation (EC) No 1272/2008 (SECTION 2, SECTION 16):

- Hazard statements
- Precautionary statements

### **Texts of the legislative phrases mentioned in section 2:**

H412: Harmful to aquatic life with long lasting effects.

H317: May cause an allergic skin reaction.

### **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

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

Acute Tox. 2: H330 - Fatal if inhaled.

Acute Tox. 3: H301+H311 - Toxic if swallowed or in contact with skin.

Aquatic Acute 1: H400 - Very toxic to aquatic life.

Aquatic Chronic 1: H410 - Very toxic to aquatic life with long lasting effects.

Eye Dam. 1: H318 - Causes serious eye damage.

Eye Irrit. 2: H319 - Causes serious eye irritation.

Skin Corr. 1: H314 - Causes severe skin burns and eye damage.

Skin Corr. 1B: H314 - Causes severe skin burns and eye damage.

Skin Sens. 1A: H317 - May cause an allergic skin reaction.

### **Classification procedure:**

Aquatic Chronic 3: Calculation method

Skin Sens. 1A: Calculation method

### **Advice related to training:**



**PERFECTOSE**

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

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

**Principal bibliographical sources:**

<http://echa.europa.eu>

<http://eur-lex.europa.eu>

**Abbreviations and acronyms:**

ADR: European agreement concerning the international carriage of dangerous goods by road

IMDG: International maritime dangerous goods code

IATA: International Air Transport Association

ICAO: International Civil Aviation Organisation

COD: Chemical Oxygen Demand

BOD5: 5day biochemical oxygen demand

BCF: Bioconcentration factor

LD50: Lethal Dose 50

LC50: Lethal Concentration 50

EC50: Effective concentration 50

LogPOW: Octanolwater partition coefficient

Koc: Partition coefficient of organic carbon

UFI: unique formula identifier

IARC: International Agency for Research on Cancer

*\*\* Changes with regards to the previous version*

The information contained in this safety data sheet is based on sources, technical knowledge and current legislation at European and state level, 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 -