




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

- 1.1 Product identifier:** BioProtect 2
- Other means of identification:**
- UFI:** JN80-FODK-T00R-VMM1
- 1.2 Relevant identified uses of the substance or mixture and uses advised against:**
- Relevant uses: Biocide
- Biocidal product PT2: Disinfectants and algacides not intended for direct application to humans or animals
- 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:**
- Maritim Consultants AS  
P.O. Box 83  
NO-5346 Aagotnes - Norway  
Tlf.: +47 5631 1760  
post@maritim.as  
www.dieseldyr.no
- 1.4 Emergency telephone number:** Emergency telephone number Europe: 112

## 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.
- Acute Tox. 3: Acute inhalation toxicity, Category 3, H331  
Acute Tox. 4: Acute toxicity if swallowed, Category 4, H302  
Aquatic Chronic 3: Hazardous to the aquatic environment, long-term hazard, Category 3, H412  
Eye Dam. 1: Serious eye damage, Category 1, H318  
Flam. Liq. 3: Flammable liquids, Category 3, H226  
Resp. Sens. 1: Sensitisation, respiratory, Category 1, H334  
Skin Corr. 1B: Skin corrosion, Category 1B, H314  
Skin Sens. 1A: Sensitisation, skin, Category 1A, H317  
STOT SE 3: Respiratory tract toxicity, single exposure, Category 3, H335  
STOT SE 3: Specific toxicity causing drowsiness and dizziness, single exposure, Category 3, H336
- 2.2 Label elements:**
- CLP Regulation (EC) No 1272/2008:**
- Danger**
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- Hazard statements:**
- Acute Tox. 3: H331 - Toxic if inhaled.  
Acute Tox. 4: H302 - Harmful if swallowed.  
Aquatic Chronic 3: H412 - Harmful to aquatic life with long lasting effects.  
Flam. Liq. 3: H226 - Flammable liquid and vapour.  
Resp. Sens. 1: H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
Skin Corr. 1B: H314 - Causes severe skin burns and eye damage.  
Skin Sens. 1A: H317 - May cause an allergic skin reaction.  
STOT SE 3: H335 - May cause respiratory irritation.  
STOT SE 3: H336 - May cause drowsiness or dizziness.
- Precautionary statements:**

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## SECTION 2: HAZARDS IDENTIFICATION (continued)

P101: If medical advice is needed, have product container or label at hand.  
P102: Keep out of reach of children.  
P280: Wear protective gloves/protective clothing/respiratory protection/eye protection/protective footwear.  
P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.  
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P501: Dispose of contents/container according to the separated collection system used in your municipality.

### Supplementary information:

EUH071: Corrosive to the respiratory tract.

### Substances that contribute to the classification

Propan-2-ol; Glutaral

### 2.3 Other hazards:

Product does not meet PBT/vPvB criteria

Endocrine-disrupting properties: The product does not meet the criteria.

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substance:

Non-applicable

### 3.2 Mixture:

**Chemical description:** Aqueous mixture composed of biocides

### Components:

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

Identification	Chemical name/Classification		Concentration
CAS: 67-63-0 EC: 200-661-7 Index: 603-117-0-0 REACH: 01-2119457558-25-XXXX	<b>Propan-2-ol<sup>(1)</sup></b> ATP CLP00		<b>60%</b>
	Regulation 1272/2008	Eye Irrit. 2: H319; Flam. Liq. 2: H225; STOT SE 3: H336 - Danger	
CAS: 111-30-8 EC: 203-856-5 Index: 605-022-00-X REACH: 01-2119455549-26-XXXX	<b>Glutaral<sup>(1)</sup></b> ATP ATP09		<b>20%</b>
	Regulation 1272/2008	Acute Tox. 2: H330; Acute Tox. 3: H301; Aquatic Acute 1: H400; Aquatic Chronic 2: H411; Resp. Sens. 1: H334; Skin Corr. 1B: H314; Skin Sens. 1A: H317; STOT SE 3: H335; EUH071 - Danger	
CAS: 52-51-7 EC: 200-143-0 Index: 603-085-00-8 REACH: 01-2119980938-15-XXXX	<b>bronopol (INN)<sup>(1)</sup></b> ATP ATP01		<b>0,1%</b>
	Regulation 1272/2008	Acute Tox. 4: H302+H312; Aquatic Acute 1: H400; Eye Dam. 1: H318; Skin Irrit. 2: H315; STOT SE 3: H335 - Danger	

<sup>(1)</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	
bronopol (INN) CAS: 52-51-7 EC: 200-143-0	Acute	10
	Chronic	1

Identification	Specific concentration limit
Glutaral CAS: 111-30-8 EC: 203-856-5	% (w/w) >=0,5: STOT SE 3 - H335

Acute toxicity estimate for the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or as determined in accordance with Annex I to that Regulation:

Identification	Acute toxicity		Genus
Glutaral CAS: 111-30-8 EC: 203-856-5	LD50 oral	246 mg/kg	Rat
	LD50 dermal	Not relevant	
	LC50 inhalation	0,5 mg/L (ATEi)	

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

Identification	Acute toxicity		Genus
bronopol (INN)	LD50 oral	500 mg/kg	Rat
CAS: 52-51-7	LD50 dermal	1600 mg/kg	Rabbit
EC: 200-143-0	LC50 inhalation	Not relevant	

### SECTION 4: FIRST AID MEASURES

#### 4.1 Description of first aid measures:

Request medical assistance immediately, showing the SDS of this product.

##### By inhalation:

Remove the person affected from the area of exposure, provide with fresh air and keep at rest. In serious cases such as cardiorespiratory failure, artificial resuscitation techniques will be necessary (mouth to mouth resuscitation, cardiac massage, oxygen supply, etc.) requiring immediate medical assistance.

##### By skin contact:

Remove contaminated clothing and footwear, rinse skin or shower the person affected if appropriate with plenty of cold water and neutral soap. In serious cases see a doctor. If the product causes burns or freezing, clothing should not be removed as this could worsen the injury caused if it is stuck to the skin. If blisters form on the skin, these should never be burst as this will increase the risk of infection.

##### By eye contact:

Rinse eyes thoroughly with lukewarm water for at least 15 minutes. Do not allow the person affected to rub or close their eyes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, in which case 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:

Request immediate medical assistance, showing the SDS of this product. Do not induce vomiting, because its expulsion from the stomach can be hazardous to the mucus of the main digestive tract, and also risk damage to the respiratory system through inhalation. Rinse out the mouth and throat, as they may have been affected during ingestion. In the case of loss of consciousness do not administer anything orally unless supervised by a doctor. Keep the person affected at rest.

#### 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:

Not relevant

### SECTION 5: FIREFIGHTING MEASURES

#### 5.1 Extinguishing media:

##### Suitable extinguishing media:

Foam extinguisher (AB), Dry Chemical Powder (ABC) Fire Extinguisher, Carbon dioxide extinguisher (BC)

##### Unsuitable extinguishing media:

Water jet

#### 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.

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## 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:

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

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

Transfer in well ventilated areas, preferably through localized extraction. Fully control sources of ignition (mobile phones, sparks,...) and ventilate during cleaning operations. Avoid the existence of dangerous atmospheres inside containers, applying inertization systems where possible. Transfer at a slow speed to avoid the creation of electrostatic charges. Against the possibility of electrostatic charges: ensure a perfect equipotential connection, always use groundings, do not wear work clothes made of acrylic fibres, preferably wearing cotton clothing and conductive footwear. Comply with the essential security requirements for equipment and systems defined in Directive 2014/34/EC (ATEX 100) and with the minimum requirements for protecting the security and health of workers under the selection criteria of Directive 1999/92/EC (ATEX 137). 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

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.- Specific storage requirements

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

### 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 Control parameters:

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

There are no applicable occupational exposure limits for the substances contained in the product

#### DNEL (Workers):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Propan-2-ol CAS: 67-63-0 EC: 200-661-7	Oral	Not relevant	Not relevant	Not relevant	Not relevant
	Dermal	Not relevant	Not relevant	888 mg/kg	Not relevant
	Inhalation	1000 mg/m <sup>3</sup>	Not relevant	500 mg/m <sup>3</sup>	Not relevant
Glutaral CAS: 111-30-8 EC: 203-856-5	Oral	Not relevant	Not relevant	Not relevant	Not relevant
	Dermal	Not relevant	Not relevant	6,25 mg/kg	Not relevant
	Inhalation	Not relevant	Not relevant	Not relevant	Not relevant
bronopol (INN) CAS: 52-51-7 EC: 200-143-0	Oral	Not relevant	Not relevant	Not relevant	Not relevant
	Dermal	Not relevant	Not relevant	2 mg/kg	Not relevant
	Inhalation	Not relevant	Not relevant	3,5 mg/m <sup>3</sup>	2,5 mg/m <sup>3</sup>

#### DNEL (General population):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Propan-2-ol CAS: 67-63-0 EC: 200-661-7	Oral	51 mg/kg	Not relevant	26 mg/kg	Not relevant
	Dermal	Not relevant	Not relevant	319 mg/kg	Not relevant
	Inhalation	178 mg/m <sup>3</sup>	Not relevant	114 mg/m <sup>3</sup>	Not relevant
Glutaral CAS: 111-30-8 EC: 203-856-5	Oral	Not relevant	Not relevant	0,07 mg/kg	Not relevant
	Dermal	Not relevant	Not relevant	Not relevant	Not relevant
	Inhalation	Not relevant	Not relevant	Not relevant	Not relevant
bronopol (INN) CAS: 52-51-7 EC: 200-143-0	Oral	0,5 mg/kg	Not relevant	0,18 mg/kg	Not relevant
	Dermal	Not relevant	Not relevant	0,7 mg/kg	Not relevant
	Inhalation	Not relevant	Not relevant	0,6 mg/m <sup>3</sup>	Not relevant

#### PNEC:

Identification					
Propan-2-ol CAS: 67-63-0 EC: 200-661-7	STP	2251 mg/L	Fresh water	140,9 mg/L	
	Soil	28 mg/kg	Marine water	140,9 mg/L	
	Intermittent	140,9 mg/L	Sediment (Fresh water)	552 mg/kg	
	Oral	0,16 g/kg	Sediment (Marine water)	552 mg/kg	
Glutaral CAS: 111-30-8 EC: 203-856-5	STP	0,8 mg/L	Fresh water	0,003 mg/L	
	Soil	0,21 mg/kg	Marine water	0 mg/L	
	Intermittent	0,006 mg/L	Sediment (Fresh water)	0,091 mg/kg	
	Oral	Not relevant	Sediment (Marine water)	0,009 mg/kg	
bronopol (INN) CAS: 52-51-7 EC: 200-143-0	STP	0,43 mg/L	Fresh water	0,01 mg/L	
	Soil	0,5 mg/kg	Marine water	0,001 mg/L	
	Intermittent	0,003 mg/L	Sediment (Fresh water)	0,041 mg/kg	
	Oral	Not relevant	Sediment (Marine water)	0,003 mg/kg	

### 8.2 Exposure controls:

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

In accordance with the order of importance to control professional exposure (Directive 98/24/EC) it is recommended to use localized extraction in the work area as a collective protection measure to avoid exceeding the occupational exposure limits. In case of using personal protective equipment it should have CE marking in accordance with Directive 2016/425/EC. For more information on Personal Protective Equipment (storage, use, cleaning, maintenance, class of protection,...) consult the information leaflet provided by the manufacturer. For additional 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





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



Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory respiratory tract protection	Filter mask for gases and vapours	 CAT III	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	Chemical protective gloves (Material: Butyl, Breakthrough time: > 480 min, Thickness: 0.3 mm)	 CAT III	EN ISO 21420:2020	Replace the gloves at any sign of deterioration.
 Mandatory hand protection	Chemical protective gloves (Material: Neoprene, Breakthrough time: > 480 min, Thickness: 0.3 mm)	 CAT III	EN ISO 21420:2020	Replace the gloves at any sign of deterioration.

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.	 CAT II	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
 Mandatory complete body protection	Disposable clothing for protection against chemical risks, with antistatic and fireproof properties	 CAT III	EN 1149-1,2,3 EN 13034:2005+A1:2009 EN ISO 13982-1:2005/A1:2011 EN ISO 6529:2013 EN ISO 6530:2005 EN ISO 13688:2013 EN 464:1995	For professional use only. Clean periodically according to the manufacturer's instructions.
 Mandatory foot protection	Safety footwear for protection against chemical risk, with antistatic and heat resistant properties	 CAT III	EN ISO 13287:2020 EN ISO 20345:2022 EN 13832-1:2019	Replace boots at any sign of deterioration.

### 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

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

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

\*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)

For complete information see the product datasheet.

### Appearance:

Physical state at 20 °C:	Liquid
Appearance:	Fluid
Colour:	Green
Odour:	Pungent
Odour threshold:	Not relevant *

### Volatility:

Boiling point at atmospheric pressure:	~89 °C
Vapour pressure at 40 °C:	Not relevant *
Vapour pressure at 50 °C:	Not relevant *
Evaporation rate at 40 °C:	Not relevant *

### Product description:

Density at 40 °C:	Not relevant *
Relative density at 40 °C:	Not relevant *
Dynamic viscosity at 40 °C:	3,5 cP
Kinematic viscosity at 40 °C:	Not relevant *
Concentration:	Not relevant *
pH:	Not relevant *
Vapour density at 40 °C:	Not relevant *
Partition coefficient n-octanol/water 40 °C:	Not relevant *
Solubility in water at 40 °C:	Not relevant *
Solubility properties:	Water miscible
Decomposition temperature:	Not relevant *
Melting point/freezing point:	Not relevant *

### Flammability:

Flash Point:	~24 °C
Flammability (solid, gas):	Not relevant *
Autoignition temperature:	Not relevant *
Lower flammability limit:	2 % Volume
Upper flammability limit:	13 % Volume

### 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 relevant *
Oxidising properties:	Not relevant *
Corrosive to metals:	Not relevant *
Heat of combustion:	Not relevant *
Aerosols-total percentage (by mass) of flammable components:	Not relevant *

### Other safety characteristics:

Surface tension at 40 °C:	Not relevant *
Refraction index:	Not relevant *

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

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## 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 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 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	Risk of combustion	Avoid direct impact	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:

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

#### 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:

#### A- Ingestion (acute effect):

- Acute toxicity: The consumption of a considerable dose can cause irritation in the throat, abdominal pain, nausea and vomiting.
- Corrosivity/Irritability: Corrosive product, if it is swallowed causes burns destroying the tissues. For more information about secondary effects from skin contact see section 2.

#### B- Inhalation (acute effect):

- Acute toxicity : Inhalation after prolonged exposure may be lethal.
- Corrosivity/Irritability: Corrosive to the respiratory tract

#### C- Contact with the skin and the eyes (acute effect):

- Contact with the skin: Above all, skin contact may occur as fabrics of all thicknesses can be destroyed, resulting in burns. For more information on the secondary effects see section 2.
- Contact with the eyes: Produces serious eye damage after contact.

#### 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: Propan-2-ol (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: Prolonged exposure can result in specific respiratory hypersensitivity.
- Skin: Prolonged contact with the skin can result in episodes of allergic contact dermatitis.

#### F- Specific target organ toxicity (STOT) - single exposure:

Causes irritation in respiratory passages, which is normally reversible and limited to the upper respiratory passages.

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## SECTION 11: TOXICOLOGICAL INFORMATION (continued)

### 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:

Not relevant

### Specific toxicology information on the substances:

Identification	Acute toxicity		Genus
Glutaral CAS: 111-30-8 EC: 203-856-5	LD50 oral	246 mg/kg (ATEi)	Rat
	LD50 dermal	>2000 mg/kg	
	LC50 inhalation	0,5 mg/L (ATEi)	
Propan-2-ol CAS: 67-63-0 EC: 200-661-7	LD50 oral	5280 mg/kg	Rat
	LD50 dermal	12800 mg/kg	Rat
	LC50 inhalation	72,6 mg/L (4 h)	Rat
bronopol (INN) CAS: 52-51-7 EC: 200-143-0	LD50 oral	500 mg/kg	Rat
	LD50 dermal	1600 mg/kg	Rabbit
	LC50 inhalation	>5 mg/L	

### Acute Toxicity Estimate (ATE mix):

ATE mix		Ingredient(s) of unknown toxicity
Oral	1230 mg/kg (Calculation method)	0 %
Dermal	>2000 mg/kg (Calculation method)	Non-applicable
Inhalation	2,5 mg/L (4 h) (Calculation method)	0 %

### 11.2 Information on other hazards:

#### Endocrine disrupting properties

Endocrine-disrupting properties: The product does not meet the criteria.

#### Other information

Not relevant

## SECTION 12: ECOLOGICAL INFORMATION

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

Harmful to aquatic life with long lasting effects.

### 12.1 Toxicity:

#### Acute toxicity:

Identification	Concentration		Species	Genus
Propan-2-ol CAS: 67-63-0 EC: 200-661-7	LC50	9640 mg/L (96 h)	Pimephales promelas	Fish
	EC50	13299 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	1000 mg/L (72 h)	Scenedesmus subspicatus	Algae
Glutaral CAS: 111-30-8 EC: 203-856-5	LC50	13 mg/L (96 h)	Lepomis macrochirus	Fish
	EC50	14 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	0,61 mg/L (72 h)	Scenedesmus subspicatus	Algae
bronopol (INN) CAS: 52-51-7 EC: 200-143-0	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

#### Chronic toxicity:

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## SECTION 12: ECOLOGICAL INFORMATION (continued)

Identification	Concentration		Species	Genus
Glutaral CAS: 111-30-8 EC: 203-856-5	NOEC	3,2 mg/L	Oncorhynchus mykiss	Fish
	NOEC	5 mg/L	Daphnia magna	Crustacean
bronopol (INN) CAS: 52-51-7 EC: 200-143-0	NOEC	21,5 mg/L	Oncorhynchus mykiss	Fish
	NOEC	0,27 mg/L	Daphnia magna	Crustacean

### 12.2 Persistence and degradability:

#### Substance-specific information:

Identification	Degradability		Biodegradability	
Propan-2-ol CAS: 67-63-0 EC: 200-661-7	BOD5	1,19 g O <sub>2</sub> /g	Concentration	100 mg/L
	COD	2,23 g O <sub>2</sub> /g	Period	14 days
	BOD5/COD	0,53	% Biodegradable	86 %
Glutaral CAS: 111-30-8 EC: 203-856-5	BOD5	Not relevant	Concentration	100 mg/L
	COD	Not relevant	Period	28 days
	BOD5/COD	Not relevant	% Biodegradable	59 %
bronopol (INN) CAS: 52-51-7 EC: 200-143-0	BOD5	Not relevant	Concentration	100 mg/L
	COD	Not relevant	Period	28 days
	BOD5/COD	Not relevant	% Biodegradable	0 %

### 12.3 Bioaccumulative potential:

#### Substance-specific information:

Identification	Bioaccumulation potential	
Propan-2-ol CAS: 67-63-0 EC: 200-661-7	BCF	3
	Pow Log	0.05
	Potential	Low
bronopol (INN) CAS: 52-51-7 EC: 200-143-0	BCF	0.6
	Pow Log	-0.64
	Potential	Low

### 12.4 Mobility in soil:

Identification	Absorption/desorption		Volatility	
Propan-2-ol CAS: 67-63-0 EC: 200-661-7	Koc	1.5	Henry	8,207E-1 Pa·m <sup>3</sup> /mol
	Conclusion	Very High	Dry soil	Yes
	Surface tension	2,24E-2 N/m (25 °C)	Moist soil	Yes

Insoluble in water, soluble in organic solvents

### 12.5 Results of PBT and vPvB assessment:

Product does not meet PBT/vPvB criteria

### 12.6 Endocrine disrupting properties:

Endocrine-disrupting properties: The product does not 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)
20 01 19* 15 01 10*	Pesticides packaging containing residues of or contaminated by hazardous substances	Hazardous

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

HP14 Ecotoxic, HP3 Flammable, HP5 Specific Target Organ Toxicity (STOT)/Aspiration Toxicity, HP6 Acute Toxicity, HP13 Sensitising, HP8 Corrosive

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## SECTION 13: DISPOSAL CONSIDERATIONS (continued)

### 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-hazardous 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

### Transport of dangerous goods by land:

With regard to ADR 2023 and RID 2023:



- |  |  |
|--|--|
| <b>14.1 UN number or ID number:</b>                                  | UN3286   |
| <b>14.2 UN proper shipping name:</b>                                 | FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S. (Propan-2-ol; Glutaral) |
| <b>14.3 Transport hazard class(es):</b>                              | 3  |
| Labels:  | 3, 6.1, 8  |
| <b>14.4 Packing group:</b>   | II   |
| <b>14.5 Environmental hazards:</b>                                   | No   |
| <b>14.6 Special precautions for user</b>                             |  |
| Special regulations:   | 274  |
| Tunnel restriction code:   | D/E  |
| Physico-Chemical properties:   | see section 9  |
| Limited quantities:  | 1 L  |
| <b>14.7 Maritime transport in bulk according to IMO instruments:</b> | Not relevant   |

### Transport of dangerous goods by sea:

With regard to IMDG 41-22:



- |  |  |
|--|--|
| <b>14.1 UN number or ID number:</b>                                  | UN3286   |
| <b>14.2 UN proper shipping name:</b>                                 | FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S. (Propan-2-ol; Glutaral) |
| <b>14.3 Transport hazard class(es):</b>                              | 3  |
| Labels:  | 3, 6.1, 8  |
| <b>14.4 Packing group:</b>   | II   |
| <b>14.5 Marine pollutant:</b>  | No   |
| <b>14.6 Special precautions for user</b>                             |  |
| Special regulations:   | 274  |
| EmS Codes:   | F-E, S-C   |
| Physico-Chemical properties:   | see section 9  |
| Limited quantities:  | 1 L  |
| Segregation group:   | Not relevant   |
| <b>14.7 Maritime transport in bulk according to IMO instruments:</b> | Not relevant   |

### Transport of dangerous goods by air:

With regard to IATA/ICAO 2024:

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## SECTION 14: TRANSPORT INFORMATION (continued)



- 14.1 UN number or ID number:** UN3286  
**14.2 UN proper shipping name:** FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S. (Propan-2-ol; Glutaral)  
**14.3 Transport hazard class(es):** 3  
**Labels:** 3, 6.1, 8  
**14.4 Packing group:** II  
**14.5 Environmental hazards:** No  
**14.6 Special precautions for user**  
 Physico-Chemical properties: see section 9  
**14.7 Maritime transport in bulk according to IMO instruments:** Not relevant

## 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 bronopol (INN), Glutaral.
- Article 95, REGULATION (EU) No 528/2012: *Propan-2-ol* (67-63-0) - PT: (1,2,4) ; *Glutaral* (111-30-8) - PT: (2,3,4,6,11,12) ; *bronopol* (INN) (52-51-7) - PT: (2,6,11,12,22)
- Candidate substances for authorisation under the Regulation (EC) No 1907/2006 (REACH): *Glutaral* (111-30-8)
- Regulation (EU) No 2024/590, about substances that deplete the ozone layer: Not relevant
- REGULATION (EU) No 649/2012, in relation to the import and export of hazardous chemical products: Not relevant
- Substances included in Annex XIV of REACH ("Authorisation List") and sunset date: Not relevant

#### Seveso III:

Section	Description	Lower-tier requirements	Upper-tier requirements
H2	ACUTE TOXIC	50	200
P5c	FLAMMABLE LIQUIDS	5000	50000

#### 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

Regulation (EU) No 528/2012 of the European Parliament and of the Council of 22 May 2012 concerning the making available on the market and use of biocidal products

### 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.:

Not relevant

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## SECTION 16: OTHER INFORMATION (continued)

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

H335: May cause respiratory irritation.  
H336: May cause drowsiness or dizziness.  
H318: Causes serious eye damage.  
H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
H412: Harmful to aquatic life with long lasting effects.  
H317: May cause an allergic skin reaction.  
H302: Harmful if swallowed.  
H331: Toxic if inhaled.  
H226: Flammable liquid and vapour.  
H314: Causes severe skin burns and eye damage.

### 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 - Toxic if swallowed.  
Acute Tox. 4: H302+H312 - Harmful if swallowed or in contact with skin.  
Aquatic Acute 1: H400 - Very toxic to aquatic life.  
Aquatic Chronic 2: H411 - Toxic 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.  
Resp. Sens. 1: H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
Skin Corr. 1B: 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.  
STOT SE 3: H335 - May cause respiratory irritation.  
STOT SE 3: H336 - May cause drowsiness or dizziness.

### Classification procedure:

STOT SE 3: Calculation method  
STOT SE 3: Calculation method  
Eye Dam. 1: Calculation method  
Resp. Sens. 1: Calculation method  
Aquatic Chronic 3: Calculation method  
Skin Sens. 1A: Calculation method  
Acute Tox. 4: Calculation method  
Acute Tox. 3: Calculation method  
Flam. Liq. 3: Calculation method (2.6.4.3)  
Skin Corr. 1B: Calculation method

### Advice related to training:

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

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## Safety data sheet

This SDS is an English translation of COMMISSION REGULATION (EU) 2020/878, without any country-specific legislation

### BioProtect 2



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 -