

SAFETY DATA SHEET**Bio Protect**

The safety data sheet is in accordance with Commission Regulation (EU) 2020/878 of 18 June 2020 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

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

Date issued 20.01.2022

1.1. Product identifier

Product name Bio Protect

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

Use of the substance / preparation Biocide.

1.3. Details of the supplier of the safety data sheet**Supplier**

Company name Kronobryggan AB
Postal address Viktorshögsvägen 30
Postcode SE-26162
City Glumslöv
Country Sweden
Telephone number +46 (0)418 704 70
Email kf.ab@landskrona.net

1.4. Emergency telephone number

Emergency telephone Telephone number: 111 (NHS)
Description: For poisoning emergencies (UK)

Telephone number: +47 22 59 13 00
Description: Norwegian Poison Information Center

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP / GHS]	Flam. Liq. 3; H226 Acute Tox. 4; H302 Acute Tox. 4; H332 Skin Corr. 1B; H314 Eye Dam. 1; H318 Resp. Sens. 1; H334 Skin Sens. 1A; H317 Aquatic Chronic 3; H412
Substance / mixture hazardous properties	Flammable liquid and vapour. Harmful if inhaled and swallowed. Causes severe burns and eye damage. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause sensitisation by skin contact. Harmful to aquatic life with long lasting effects.

2.2. Label elements

Hazard pictograms (CLP)



Composition on the label	1,5-Pentanedial
Signal word	Danger
Hazard statements	H226 Flammable liquid and vapour. H302 + H332 Harmful if swallowed or if inhaled. H314 Causes severe skin burns and eye damage. H317 May cause an allergic skin reaction. H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled. H412 Harmful to aquatic life with long lasting effects.
Precautionary statements	P101 If medical advice is needed, have product container or label at hand. P102 Keep out of reach of children. P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P280 Wear protective gloves / protective clothing / eye protection / face protection. P303+P361+P353 IF ON SKIN (or hair): Remove / Take off immediately all contaminated clothing. Rinse skin with water / shower. P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310 Immediately call a POISON CENTER or doctor / physician. P501 Dispose of contents / container to an approved waste disposal plant.

Supplemental label information	EUH 071 Corrosive to the respiratory tract.
Tactile warnings	Yes
Child-protection	Yes

2.3. Other hazards

PBT / vPvB	The chemical contains no PBT or vPvB substances.
Other hazards	The chemical does not contain any known or suspected endocrine disruptors.

SECTION 3: Composition / information on ingredients

3.2. Mixtures

Substance	Identification	Classification	Contents	Notes
Ethanol	CAS No.: 64-17-5 EC No.: 200-578-6 Index No.: 603-002-00-5	Flam. Liq. 2; H225;	50 - 70 %	
1,5-Pentanedial	CAS No.: 111-30-8 EC No.: 203-856-5 Index No.: 605-022-00-X	Acute Tox. 2; H330 Acute Tox. 3; H301 STOT SE 3; H335; SCL STOT SE 3; H335 0,5 % ≤ C < 5 % Skin Corr. 1B; H314 Resp. Sens. 1; H334 Skin Sens. 1A; H317 Aquatic Acute 1; H400; M-factor 1 Aquatic Chronic 2; H411; M-factor 1 EUH 071	10 < 22 %	
Bronopol (INN)	CAS No.: 52-51-7 EC No.: 200-143-0 Index No.: 603-085-00-8	Acute tox. 4; H312; Acute tox. 4; H302; STOT SE 3; H335; Skin Irrit. 2; H315; Eye Dam. 1; H318; Aquatic Acute 1; H400; M-factor 10;	< 0,1 %	

Remarks, substance	CAS No 111-30-8 has specific concentration limits: STOT SE 3; H335 0,5 % ≤ C < 5 %
Substance comments	See section 16 for explanation of hazard statements (H) listed above.

SECTION 4: First aid measures

4.1. Description of first aid measures

General	Call a POISON CENTER or doctor/physician if you feel unwell.
Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. For breathing difficulties oxygen may be necessary. Call a POISON CENTER or doctor/physician.
Skin contact	Rinse skin with water/shower. Chemical burns must be treated by a physician.
Eye contact	Important! Immediately rinse with water for 15-30 minutes. Remove contact lenses and open eyes wide apart. Use luke warm water to avoid damage to the eye. Transport to physician. Keep on flushing during transport.
Ingestion	Immediately rinse mouth and drink plenty of water or milk. Keep person under observation. Do not induce vomiting. If vomiting occurs, keep head low. Transport immediately to hospital and bring along these instructions.

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

Acute symptoms and effects	<p>Inhalation: Inhalation of vapors may cause severe irritation or burns in the respiratory tract. May cause asthma-like respiratory difficulty.</p> <p>Skin contact: Corrosive. Forms blisters and can cause ulceration. May cause sensitisation by skin contact. Allergic skin reactions: symptoms may include redness, swelling, blistering and itching.</p> <p>Eye contact: The chemical is corrosive to the eyes and may cause permanent damage. Symptoms such as strong burning, tearing/watering, redness and blurred vision may occur. In severe cases, there is a risk of visual damage/blindness.</p> <p>Ingestion: Causes burns if swallowed. Causes burning sensation in the mouth, throat and esophagus. May cause serious permanent damage.</p>
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4.3. Indication of any immediate medical attention and special treatment needed

Medical treatment	<p>Treat symptomatically.</p> <p>If you need medical attention, bring the safety data sheet or instructions for use if possible.</p>
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Dry-powder, carbon dioxide (CO ₂), water mist, alcohol resistant foam.
Improper extinguishing media	Do not use water jet.

5.2. Special hazards arising from the substance or mixture

Fire and explosion hazards	Flammable liquid and vapour.
Hazardous combustion products	<p>May develop highly toxic or corrosive fumes if heated.</p> <p>May include, but is not limited to: Carbon dioxide (CO₂). Carbon monoxide (CO).</p>

5.3. Advice for firefighters

Personal protective equipment	Firefighters who may be exposed to smoke or thermal decomposition products
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	shall wear all available personal protective equipment (PPE) and SCBA mask.
Other information	Containers close to fire should be removed immediately or cooled with water. Water used for fire extinguishing, which has been in contact with the product, may be corrosive. Extinguishing water must not be discharged into drains. Extinguishing water must be disposed of in accordance with local regulations.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	Remove all sources of ignition. Provide adequate ventilation. Stop leak if safe to do so.
Personal protection measures	Avoid inhalation of vapours and contact with skin and eyes. Use protective equipment as referred to in section 8. Beware! The product is corrosive.

6.2. Environmental precautions

Environmental precautionary measures	Do not allow to enter into sewer, water system or soil. Spillages or uncontrolled discharges into watercourses must be IMMEDIATELY alerted to the Environmental Agency or other appropriate regulatory body.
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6.3. Methods and material for containment and cleaning up

Clean up	Absorb small quantities with paper towels, rags or twist, and store as flammable waste until proper disposal. Large Spillages: Absorb in vermiculite, dry sand or earth and place into containers. Collect in a suitable container and dispose as hazardous waste according to section 13. Collect and reclaim or dispose in sealed containers in licensed waste. Flush area with plenty of water.
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6.4. Reference to other sections

Other instructions	See also sections 8 and 13.
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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Handling	Use biocides safely. Always read the label and product information before use. Provide adequate ventilation. Avoid inhalation of vapours and contact with skin and eyes. Use protective equipment as referred to in section 8. Beware! The product is corrosive. Personnel with a history of asthma-type conditions, bronchitis or skin sensitisation conditions should not use this chemical.
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Protective safety measures

Safety measures to prevent fire	Keep away from heat / sparks / open flames / hot surfaces. – No smoking. Use only non-sparking tools. Take precautionary measures against static discharges.
Advice on general occupational hygiene	Provide easy access to water supply or an emergency shower. Do not eat, drink or smoke during work. Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage	Flammable liquid storage. Store in tightly closed original container in a dry, cool and well-ventilated place. Keep out of reach of children.
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Conditions for safe storage

Advice on storage compatibility	Flammable/combustible - Keep away from oxidisers, heat and flames. Keep away from: Food and feed.
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7.3. Specific end use(s)

Specific use(s)	See section 1.2.
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SECTION 8: Exposure controls / personal protection

8.1. Control parameters

Substance	Identification	Exposure limits	TWA Year
Ethanol	CAS No.: 64-17-5	Limit value (8 h) : 1000 ppm Limit value (8 h) : 1920 mg/ m ³	
1,5-Pentanedial	CAS No.: 111-30-8	Limit value (8 h) : 0,05 ppm Limit value (8 h) : 0,2 mg/ m ³ Limit value (short term) Value: 0,05 ppm Limit value (short term) Value: 0,2 mg/m ³ Exposure limit letter Letter code: Sen	

Control parameters comments	References (laws/regulations): EH40/2005 Workplace exposure limits, with later amendments. Explanation of the notations: Sen = Capable of causing occupational asthma.
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DNEL / PNEC

DNEL	Group: Professional Route of exposure: Acute inhalation (local)
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Value: 1900 mg/m³
Reference: CAS 64-17-5

Group: Professional
Route of exposure: Long-term dermal (systemic)
Value: 343 mg/kg bw/day
Reference: CAS 64-17-5

Group: Professional
Route of exposure: Long-term inhalation (systemic)
Value: 950 mg/m³
Reference: CAS 64-17-5

Group: Consumer
Route of exposure: Acute inhalation (local)
Value: 950 mg/m³
Reference: CAS 64-17-5

Group: Consumer
Route of exposure: Long-term inhalation (systemic)
Value: 114 mg/m³
Reference: CAS 64-17-5

Group: Consumer
Route of exposure: Long-term dermal (systemic)
Value: 206 mg/kg

Group: Consumer
Route of exposure: Long-term oral (systemic)
Value: 87 mg/kg

PNEC

Route of exposure: Freshwater
Value: 0,96 mg/l
Reference: CAS 64-17-5

Route of exposure: Saltwater
Value: 0,79 mg/l
Reference: CAS 64-17-5

Route of exposure: Water
Value: 2,75 mg/l
Reference: CAS 64-17-5 Intermittent release.

Route of exposure: Sewage treatment plant STP
Value: 580 mg/l
Reference: CAS 64-17-5

Route of exposure: Freshwater sediments
Value: 3,6 mg/kg
Reference: CAS 64-17-5

Route of exposure: Saltwater sediments
Value: 2,9 mg/kg
Reference: CAS 64-17-5

Route of exposure: Soil
Value: 0,63 mg/kg

Route of exposure: Freshwater

Value: 0,0025 mg/l

Reference: CAS 111-30-8

Route of exposure: Saltwater

Value: 0,00025 mg/l

Reference: CAS 111-30-8

Route of exposure: Sewage treatment plant STP

Value: 0,8 mg/l

Reference: CAS 111-30-8

Route of exposure: Freshwater sediments

Value: 0,527 mg/kg

Reference: CAS 111-30-8

Route of exposure: Saltwater sediments

Value: 0,0527 mg/kg

Reference: CAS 111-30-8

Route of exposure: Soil

Value: 0,03 mg/kg

Reference: CAS 111-30-8

8.2. Exposure controls

Precautionary measures to prevent exposure

Technical measures to prevent exposure

Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded.

The personal protective equipment must be CE-marked and the latest version of the standards shall be used. The protective equipment and the specified standards recommended below are only suggestions, and should be selected on advice from the supplier of such equipment.

A risk assessment of the work place/work activities (the actual risk) may lead to other control measures.

Eye / face protection

Suitable eye protection

Wear tight-fitting goggles or face shield.

Eye protection equipment

Reference to relevant standard: EN 166 (Personal eye-protection. Specifications).

Additional eye protection measures

Eye wash facilities shall be available at the work place. Either a fixed eye wash facility connected to the drinking water (preferably warm water) or a portable disposable unit.

Hand protection

Suitable gloves type

Use gauntlet type rubber gloves. Suitable gloves can be recommended by the glove supplier.

Suitable materials

Butyl rubber. Viton rubber (fluor rubber). Multi-layer material (e.g. 4H, Saranex). Neoprene.

Breakthrough time

Value: 480 minute(s)

	Comments: Neoprengummi. Viton rubber (fluor rubber). Butyl rubber.
Thickness of glove material	Value: > 0,3 mm Comments: Glove thickness must be chosen in consultation with the glove supplier.
Hand protection equipment	Reference to relevant standard: EN ISO 374 (Protective gloves against chemicals and micro-organisms). EN 420 (Protective gloves - General requirements and test methods).
Additional hand protection measures	Gloves must only be worn on clean, dry hands. Replace gloves if signs of wear and tear.
Skin protection	
Suitable protective clothing	Use protective clothing, which covers arms and legs. Wear apron or protective clothing in case of contact.
Additional skin protection measures	Emergency shower should be available at the workplace.
Respiratory protection	
Respiratory protection necessary at	In case of inadequate ventilation or risk of inhalation of vapours, use suitable respiratory equipment with combination filter (type A/P2). At work in confined or poorly ventilated spaces, respiratory protection with air supply must be used.
Recommended respiratory protection	Reference to relevant standard: EN 14387 (Respiratory protective devices. Gas filter(s) and combined filter(s). Requirements, testing, marking).
Appropriate environmental exposure control	
Environmental exposure controls	Do not allow to enter into sewer, water system or soil.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Form	Liquid
Colour	Light blue.
Odour	Alcohol.
Odour limit	Comments: Data lacking.
pH	Comments: Not determined.
Melting point / melting range	Comments: Not determined.
Boiling point / boiling range	Value: > 35 °C
Flash point	Value: ~ 24 °C
Evaporation rate	Comments: Not determined.
Flammability	Not relevant, see flash point.
Explosion limit	Value: 3,5 - 15 %

	Test reference: CAS 64-17-5
Vapour pressure	Comments: Not determined.
Vapour density	Comments: Not determined.
Density	Comments: Not determined.
Solubility	Comments: Soluble in water.
Partition coefficient: n-octanol/ water	Comments: Not relevant for a mixture.
Auto-ignition temperature	Comments: Data lacking.
Decomposition temperature	Comments: Data lacking.
Viscosity	Comments: Not determined.
Explosive properties	The chemical is not explosive, but may form explosive mixtures with air.
Oxidising properties	Not oxidizing.

9.2. Other information

Other physical and chemical properties

Physical and chemical properties No further information is available.

9.2.2. Other safety characteristics

Comments Data lacking.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity Vapors may form explosive mixtures with air.

10.2. Chemical stability

Stability Stable under normal temperature conditions and recommended use.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal conditions.

10.4. Conditions to avoid

Conditions to avoid Avoid heat, flames and other sources of ignition.

10.5. Incompatible materials

Materials to avoid Oxidizing agents.

10.6. Hazardous decomposition products

Hazardous decomposition products None under normal conditions. See also section 5.2.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Effect tested: LD50
Route of exposure: Oral
Value: 6200 mg/kg
Species: Rat
Test reference: CAS 64-17-5

Effect tested: LD50
Route of exposure: Dermal
Value: > 20000 mg/kg
Species: Rabbit
Test reference: CAS 64-17-5

Effect tested: LC50
Route of exposure: Inhalation (vapour)
Value: 124,7 mg/l
Species: Rat
Test reference: CAS 64-17-5

Effect tested: LD50
Route of exposure: Oral
Value: 134 mg/kg
Species: Rat
Test reference: CAS 111-30-8

Effect tested: LD50
Route of exposure: Dermal
Value: > 2500 mg/kg
Species: Rat
Test reference: CAS 111-30-8

Effect tested: LC50
Route of exposure: Inhalation. (dust / mist)
Value: 0,48 mg/l
Species: Rat
Test reference: CAS 111-30-8

Other information regarding health hazards

Assessment of acute toxicity, classification	Harmful if inhaled and swallowed.
Assessment of skin corrosion / irritation, classification	Causes severe burns to the skin.
Assessment of eye damage or irritation, classification	Causes severe skin burns and eye damage.
Assessment of respiratory sensitisation, classification	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Assessment of skin sensitisation, classification	May cause an allergic skin reaction.

Assessment of germ cell mutagenicity, classification	Based on available data, the classification criteria are not met.
Assessment of carcinogenicity, classification	Based on available data, the classification criteria are not met.
Assessment of reproductive toxicity, classification	Based on available data, the classification criteria are not met.
Assessment of specific target organ toxicity - single exposure, classification	Based on available data, the classification criteria are not met.
Assessment of specific target organ toxicity - repeated exposure, classification	Based on available data, the classification criteria are not met.
Assessment of aspiration hazard, classification	Based on available data, the classification criteria are not met.

Symptoms of exposure

In case of ingestion	Causes burns if swallowed. Causes burning sensation in the mouth, throat and esophagus. May cause serious permanent damage.
In case of skin contact	Harmful in contact with skin. Corrosive. Forms blisters and can cause ulceration. May cause sensitisation by skin contact. Allergic skin reactions: symptoms may include redness, swelling, blistering and itching.
In case of inhalation	Inhalation of vapors may cause severe irritation or burns in the respiratory tract. May cause allergy or asthma symptoms or breathing difficulties if inhaled.
In case of eye contact	The chemical is corrosive to the eyes and may cause permanent damage. Symptoms such as strong burning, tearing/watering, redness and blurred vision may occur. In severe cases, there is a risk of visual damage/blindness.

11.2 Other information

Endocrine disruption	The chemical does not contain any known or suspected endocrine disruptors.
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SECTION 12: Ecological information

12.1. Toxicity

Aquatic toxicity, fish	Toxicity type: Acute Value: 5 mg/l Effect dose concentration: LC50 Exposure time: 96 hour(s) Species: Pimephales promelas Test reference: CAS 111-30-8
	Toxicity type: Acute Value: 20 mg/l Effect dose concentration: LC50 Exposure time: 96 hour(s) Species: Salmo gairdneri Test reference: CAS 52-51-7
Aquatic toxicity, algae	Toxicity type: Acute

Value: 0,08 mg/l
 Effect dose concentration: EC50
 Exposure time: 72 hour(s)
 Test reference: CAS 111-30-8

Toxicity type: Acute
 Value: 0,05 mg/l
 Effect dose concentration: IC50
 Exposure time: 72 hour(s)
 Test reference: CAS 52-51-7

Aquatic toxicity, crustacean

Toxicity type: Acute
 Value: 11,5 mg/l
 Exposure time: 48 hour(s)
 Species: Daphnia magna
 Test reference: CAS 111-30-8

Toxicity type: Acute
 Value: 1,4 mg/l
 Effect dose concentration: EC50
 Exposure time: 48 hour(s)
 Species: Daphnia magna
 Test reference: CAS 52-51-7

Ecotoxicity

Harmful to aquatic life with long lasting effects.

12.2. Persistence and degradability**Persistence and degradability description/evaluation**

CAS 64-17-5: Readily biodegradable.
 CAS 110-30-8: Readily biodegradable.
 CAS 52-51-7: Not readily biodegradable.

12.3. Bioaccumulative potential**Bioaccumulation, comments**

Not expected to bioaccumulate.

12.4. Mobility in soil**Mobility**

The product is miscible with water. May spread in water systems.

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

The chemical contains no PBT or vPvB substances.

12.6. Endocrine disrupting properties**Endocrine disrupting properties**

The chemical does not contain any known or suspected endocrine disruptors.

12.7. Other adverse effects**Additional ecological information**

Do not allow to enter into sewer, water system or soil.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Appropriate methods of disposal for the chemical	Do not empty into drains. Disposed of as hazardous waste by approved contractor. The waste code (EWC-Code) is intended as a guide. The code must be chosen by the user, if the use differs from the one mentioned below.
EWC waste code	EWC waste code: 070704 other organicsolvents, washing liquids and mother liquors Classified as hazardous waste: Yes
EWL packing	EWC waste code: 150110 packaging containing residues of or contaminated by dangerous substances Classified as hazardous waste: Yes

SECTION 14: Transport information

Dangerous goods	Yes
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14.1. UN number

ADR/RID/ADN	2924
IMDG	2924
ICAO/IATA	2924

14.2. UN proper shipping name

Proper shipping name English ADR/RID/ADN	FLAMMABLE LIQUID, CORROSIVE, N.O.S.
Technical name/Danger releasing substance English ADR/RID/ADN	(ethanol, glutaraldehyde)
ADR/RID/ADN	FLAMMABLE LIQUID, CORROSIVE, N.O.S.
Technical name/danger releasing substance ADR/RID/ADN	(ethanol, glutaraldehyde)
IMDG	FLAMMABLE LIQUID, CORROSIVE, N.O.S.
Technical name/danger releasing substance IMDG	(ethanol, glutaraldehyde)
ICAO/IATA	FLAMMABLE LIQUID, CORROSIVE, N.O.S.
Technical name/danger releasing substance ICAO/IATA	(ethanol, glutaraldehyde)

14.3. Transport hazard class(es)

ADR/RID/ADN	3 (8)
Classification code ADR/RID/ADN	FC
Subsidiary risk ADR/RID/ADN	(8)
IMDG	3 (8)
Subsidiary risk IMDG	(8)

ICAO/IATA	3 (8)
Subsidiary risk ICAO/IATA	(8)

14.4. Packing group

ADR/RID/ADN	III
IMDG	III
ICAO/IATA	III

14.5. Environmental hazards

IMDG Marine pollutant	No
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14.6. Special precautions for user

Special safety precautions for user	No information.
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14.7. Maritime transport in bulk according to IMO instruments

Transport in bulk (yes/no)	No
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Additional information

Hazard label ADR/RID/ADN	3+8
Hazard label IMDG	3+8
Hazard label ICAO/IATA	3+8

ADR/RID Other information

Tunnel restriction code	D/E
Transport category	3
Hazard No.	38

IMDG Other information

Additional information IMDG	Fp 24 °C.c.c.
EmS	F-E, S-C

SECTION 15: Regulatory information

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

References (laws/regulations)	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (CLP-regulation) with later amendments. Regulation (EC) No 1907/2006 on the registration, evaluation, authorization and restriction of chemicals (REACH Regulation), with later amendments. Norwegian regulations on waste. no. 930/2004, from the Ministry of
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Environment.

The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009.

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

Chemical safety assessment performed No

SECTION 16: Other information

Supplier's notes	The information contained in this SDS must be made available to all those who handle the product.
List of relevant H-phrases (Section 2 and 3)	<p>EUH 071 Corrosive to the respiratory tract.</p> <p>H225 Highly flammable liquid and vapour.</p> <p>H226 Flammable liquid and vapour.</p> <p>H301 Toxic if swallowed.</p> <p>H302 Harmful if swallowed.</p> <p>H312 Harmful in contact with skin.</p> <p>H314 Causes severe skin burns and eye damage.</p> <p>H315 Causes skin irritation.</p> <p>H317 May cause an allergic skin reaction.</p> <p>H318 Causes serious eye damage.</p> <p>H330 Fatal if inhaled.</p> <p>H332 Harmful if inhaled.</p> <p>H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.</p> <p>H335 May cause respiratory irritation.</p> <p>H400 Very toxic to aquatic life.</p> <p>H411 Toxic to aquatic life with long lasting effects.</p> <p>H412 Harmful to aquatic life with long lasting effects.</p>
CLP classification, comments	Calculation method.
Abbreviations and acronyms used	<p>ADR: The European Agreement concerning the International Carriage of Dangerous Goods by Road</p> <p>EWC: European Waste Code (a code from the EU's common classification system for waste)</p> <p>EC50: The effective concentration of substance that causes 50% of the maximum response</p> <p>IATA: The International Air Transport Association</p> <p>IC50: The concentration of compound that results in 50% inhibition of a biological or biochemical function.</p> <p>ICAO: The International Civil Aviation Organisation</p> <p>IMDG: The International Maritime Dangerous Goods Code</p> <p>LC50: Median concentration lethal to 50% of a test population.</p> <p>LD50: Lethal dose, is the amount of a substance given to a group of test animals, which causes the death of 50%.</p> <p>PBT: Persistent, Bioaccumulative and Toxic</p> <p>RID: The Regulations concerning the International Carriage of Dangerous Goods by Rail</p>

vPvB: very Persistent and very Bioaccumulative

Version

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