
SAFETY DATA SHEET

This Safety Data Sheet is provided in compliance with the EC Directive 1907/2006-453/2010

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

1.1 Product identifier

- Product Name: BIOGUARD
- Product Part Number: 777851 (25 liter)
- Datasheet Number: 777851-r2

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

- Use of the substance/mixture:
- Seawater treatment

1.3 Details of the supplier of the safety data sheet

- Name of Supplier: Wilhelmsen Ships Service AS
- Address of Supplier: Willem Barentszstraat 50, 3165AB Rotterdam, The Netherlands
- Telephone: Telephone: +31 4877 777 Fax: +31 4877 888
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- Head office: Wilhelmsen Ships Service AS
- Strandveien 20, N1324 Lysaker
- Norway, Tel: (47) 6349 440 35
-
- Other suppliers SEE SECTION 16!!!
- For quotations contact your local Customer Services
-
- Responsible Person: Product HSE Manager
- Telephone: +31 10 4877775
- Email: WSS.GLOBAL.SDSINFO@wilhelmsen.com

1.4 Emergency telephone number

- ****ONLY TO BE USED IN CASE OF AN INCIDENT****
-
- International 24hrs Emergency NCEC: + 44 1865 407333
- American 24hrs Emergency CHEMTREC (800) 424 9300
- American Chemistry Council 24hrs +1 703 527 3887
- Greece: Poisoning emergency center, +30 210 7793777
- Norway: Poison information centre, +47 22591300
- Sweden: Poison information centre, +46 08 33 12 31
- China NRCC 24hrs emergency telephone number: +86-0532-8388 9090
- Wilhelmsen Ships Service, Melbourne, AUSTRALIA Emergency 24hrs: +61 3 9630 0998
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- China NRCC 24hrs emergency telephone number: +86-0532-8388 9090

SECTION 2 Hazards identification

2.1 Classification of the substance or mixture

- Council Directive 1999/45/EEC Classification, packing and labelling of dangerous preparations.

SECTION 2 Hazards identification (....)

- Refer to current The Dangerous Substances Directive (67/548/EEC)
- Symbols: T, N
- Harmful by inhalation, in contact with skin and if swallowed (R20/21/22)
- Irritating to eyes and skin (R36/38)
- Toxic: danger of serious damage to health by prolonged exposure if swallowed (R48/25)
- Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment (R50/53)
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- Regulations 1272/2008/EEC. Classification, labeling and packing of dangerous substances and preparations
- Signal Word: Danger
- Symbols: GHS05, GHS09, GHS08
- Acute Tox. 4
- Eye Dam. 1
- Skin Corr. 1C
- STOT RE 1
- Aquatic Acute 1
- Aquatic Chronic 1

2.2 Label elements



- Signal Word: Danger
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- Contains:
- Alkyldiamine derivatives - 2-butoxyethanol - Alkyldiamine
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- Hazard phrases
 - Harmful if swallowed (H302).
 - Causes severe skin burns and eye damage (H314).
 - Causes damage to organs through prolonged or repeated exposure (H372).
 - Very toxic to aquatic life (H400).
 - Very toxic to aquatic life with long lasting effects (H410).
- Precautionary Phrases
 - Do not breathe dust/fume/gas/mist/vapours/spray (P260).
 - Wear protective gloves/protective clothing/eye protection/face protection (P280).
 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing (P305+P351+P338).
 - If eye irritation persists: Get medical advice/attention (P337+P313).
 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician (P301+P310).
 - Dispose of contents/container to an authorised waste collection point (P501)

2.3 Other hazards

- Odour: Characteristic odour
- Appearance: Liquid, pale yellow, soluble in water
- Not a PBT according to REACH Annex XIII

SECTION 3 Composition/information on ingredients

3.1 Mixtures

SECTION 3 Composition/information on ingredients (....)

- 2-butoxyethanol
Concentration: >25%
CAS Number: 111-76-2
EC Number: 203-905-0
Symbols: GHS07, Xn
R/H Phrases: R20/21/22, R36/38 - H332, H312, H302, H319, H315
Categories: Acute Tox. 4 Acute Tox. 4 Acute Tox. 4 Eye Irrit. 2 Skin Irrit. 2
 - Alkyldiamine
Concentration: <5%
CAS Number: 61791-55-7
EC Number: 263-189-0
Symbols: C, N, GHS05, GHS09, GHS08
R/H Phrases: R22, R34, R50, R48/25 - H302, H314, H372, H400, H410
Categories: Acute Tox. 4, Skin Corr. 1B, STOT RE 1, Aquatic Acute 1, Aquatic Chronic 1
 - Alkyldiamine derivatives¹
Concentration: >25%
CAS Number: 68911-78-4
EC Number: 272-786-5
Symbols: T, N - GHS05, GHS09, GHS08
R/H Phrases: R22, R36/38, R48/25, R50 - H302, H315, H319, H372, H400, H411
Categories: Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, STOT RE 1, Aquatic Acute 1, Aquatic Chronic 1
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SECTION 4 First aid measures**4.1 Description of first aid measures**

- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing (P305+P351+P338).
- Irrigate eyes thoroughly whilst lifting eyelids
- When in doubt or symptoms persist, seek medical attention
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- IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower (P303+P361+P353).
- When in doubt or symptoms persist, seek medical attention
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- IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing (P304+P341).
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- IF SWALLOWED: rinse mouth. Do NOT induce vomiting (P301+P330+P331).
- Give plenty of water to drink
- When in doubt or symptoms persist, seek medical attention
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4.2 Most important symptoms and effects, both acute and delayed

- Prolonged skin or eye contact may cause chemical burns
- Can cause damage to the eyes
- In cases of severe exposure, breathing difficulty may develop
- The ingestion of significant quantities may cause burning sensation
- The ingestion of significant quantities may cause damage to digestive system

4.3 Indication of any immediate medical attention and special treatment needed

SECTION 4 First aid measures (....)

- No information available
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SECTION 5 Fire-fighting measures

5.1 Extinguishing media

- Not flammable. In case of fire use extinguishing media appropriate to surrounding conditions

5.2 Special hazards arising from the substance or mixture

- Smoke from fires is toxic. Take precautions to protect personnel from exposure

5.3 Advice for firefighters

- Smoke from fires is toxic. Take precautions to protect personnel from exposure
 - Wear chemical protection suit and positive-pressure breathing apparatus
 - Keep container(s) exposed to fire cool, by spraying with water
 - Prevent run off water from entering drains if possible
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SECTION 6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- Wear protective clothing as per section 8

6.2 Environmental Precautions

- Do not allow to enter public sewers and watercourses

6.3 Methods and material for containment and cleaning up

- Absorb spillage in inert material and shovel up
- Ventilate the area and wash spill site after material pick-up is complete

6.4 Reference to other sections

- See Section 13
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SECTION 7 Handling and storage

7.1 Precautions for safe handling

- Wear protective clothing as per section 8
- The usual precautions for handling chemicals should be observed
- Do not get in eyes, on skin, or on clothing (P262).
- Eyewash bottles should be available

7.2 Conditions for safe storage, including any incompatibilities

- Keep in a cool, dry, well ventilated place
- Keep container tightly closed (P233).

7.3 Specific end use(s)

- Contact supplier for further information
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SECTION 8 Exposure controls/personal protection

8.1 Control parameters

- 2-butoxyethanol
WEL (short term) 50 ppm
WEL (long term) 25 ppm

8.2 Exposure controls

- No special precautions are required for this product
 - The undiluted product must not be used in a confined space without good ventilation
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SECTION 8 Exposure controls/personal protection (....)

8.3 Occupational exposure controls



- Wear suitable protective clothing, including eye/face protection and gloves (plastic or rubber are recommended)
 - Penetration time of glove material:
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
 - Respiratory protection may be required under exceptional circumstances when excessive air contamination exists
 - Wear suitable respiratory protection. Gas cartridge (organic substances).
-

SECTION 9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

- Odour: Characteristic odour
- Appearance: Liquid, pale yellow, soluble in water
- Boiling point >100 °C to 760 °C
- Vapour pressure - not known
- Completely soluble in water
- Density 0,97 g/cm³ at 20 deg C
- Flash point > 100 deg C (CC)
- Melting point/Range: Melting point -16 °C

9.2 Other information

- None
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SECTION 10 Stability and reactivity

10.1 Reactivity

- This article is considered stable under normal conditions

10.2 Possibility of hazardous reactions

- No hazardous reactions known if used for its intended purpose

10.3 Incompatible materials

- Incompatible with strong oxidizing substances

10.4 Conditions to avoid

- Avoid contact with oxidising substances

10.5 Hazardous Decomposition Products

- Decomposition products may include nitrogen and carbon oxides
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SECTION 11 Toxicological information

11.1 Information on toxicological effects

- LD50 (oral,rat) (Alkyldiamine derivatives) 300-2000 mg/kg
- LD50 (oral,rat) (2-buthoxyethanol) 2400 mg/kg

11.2 Contact with eyes

- Causes severe irritation
- Can cause damage to the eyes

11.3 Contact with skin

SECTION 11 Toxicological information (....)

- Can be absorbed through skin
- Causes irritation

11.4 Ingestion

- The ingestion of significant quantities may cause gastro-intestinal disturbances

11.5 Inhalation

- Vapours or aerosols may cause irritation of eyes, nose and respiratory tract
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SECTION 12 Ecological information**12.1 Toxicity**

- This product contains components which are classified in the EU as dangerous for the environment.
- LC50 (fish) (Alkyldiamine derivatives) 0,15 mg/l (96 hr)
- LC50 48 hours Daphnia 0,395 mg/l (Alkyldiamine derivatives)
- IC50 (algae) (Alkyldiamine derivatives) 0,507 mg/l (72 hr)

12.2 Persistence and degradability

- 10% Biodegradation after 7 days, 15% Biodegradation after 14 days, 35% Biodegradation after 21 days, 50% Biodegradation after 28 days (Marine BODIS test)

12.3 Bioaccumulation Potential

- Bioaccumulation of the components in this product is insignificant.

12.4 Mobility in soil

- Completely soluble in water

12.5 Results of PBT and vPvB assessment

- Not a PBT according to REACH Annex XIII

12.6 Other Adverse Effects

- No information available
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SECTION 13 Disposal considerations**13.1 Waste treatment methods**

- Do not discharge into drains or the environment, dispose to an authorised waste collection point
- Disposal should be in accordance with local, state or national legislation

13.2 Classification

- EU Waste class: 07.06
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SECTION 14 Transport information**14.1 UN**

- UN No.: UN2735
- Proper Shipping Name: Amines, liquid, corrosive, n.o.s. (Alkyl diamine acetate)
- Hazard Class: 8
- Packing Group: III

14.2 Environmental hazards

- Not applicable
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SECTION 14 Transport information (....)

14.3 Special precautions for user

- No special precautions are required for this product

14.4 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code

- Not applicable

14.5 Road/Rail (ADR/RID)

- ADR UN No.: UN2735
- Proper Shipping Name: Amines, liquid, corrosive, n.o.s. (Alkyl diamine acetate)
- ADR Hazard Class: 8
- ADR subrisk: Not applicable
- ADR Packing Group: III

14.6 Sea (IMDG)

- IMDG UN No.: UN2735
- Proper Shipping Name: Amines, liquid, corrosive, n.o.s. (Alkyl diamine acetate)
- IMDG Hazard Class: 8
- IMDG subrisk: Not applicable
- IMDG Pack Group.: III
- IMDG EmS: F-A, S-B

14.7 Air (ICAO/IATA)

- ICAO UN No.: UN2735
- Proper Shipping Name: Amines, liquid, corrosive, n.o.s. (Alkyl diamine acetate)
- ICAO Packing Group: III
- ICAO Hazard Class: 8
- ICAO subrisk: Not applicable

14.8 DOT / CFR (US Department of Transportation)

- Identification Number: UN2735
 - DOT Proper Shipping Name: Amines, liquid, corrosive, n.o.s. (Alkyl diamine acetate)
 - DOT Labels: 8
 - Product RQ (lbs): Not applicable
 - Hazardous Material: Alkyl diamine derivatives, 2-butoxyethanol, Alkyldiamine
 - DOT subrisk: Not applicable
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SECTION 15 Regulatory information

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

- This Safety Data Sheet has been prepared in accordance with article 31 and annex II in REACH and Directive 453/2010/EU.
- Council Directive 1999/45/EEC Classification, packing and labelling of dangerous preparations.
- Refer to The Dangerous Substances Directive (67/548/EEC)
- Regulations 1272/2008/EEC. Classification, labeling and packing of dangerous substances and preparations

15.2 Chemical Safety Assessment

- None
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SECTION 16 Other information

Text not given with phrase codes where they are used elsewhere in this safety data sheet:- H302: Harmful if swallowed. H312: Harmful in contact with skin. H314: Causes severe skin burns and eye

SECTION 16 Other information (....)

damage. H315: Causes skin irritation. H319: Causes serious eye irritation. H332: Harmful if inhaled. H372: Causes damage to organs through prolonged or repeated exposure. H400: Very toxic to aquatic life. H410: Very toxic to aquatic life with long lasting effects. H411: Toxic to aquatic life with long lasting effects. R20/21/22: Harmful by inhalation, in contact with skin and if swallowed. R22: Harmful if swallowed. R34: Causes burns. R36/38: Irritating to eyes and skin. R48/25: Toxic: danger of serious damage to health by prolonged exposure if swallowed. R50: Very toxic to aquatic organisms.

The data given here is based on current knowledge and experience. This Safety Data Sheet describes the product in terms of safety requirements and does not signify any warranty with regard to the product's properties

The data given here only applies when product used for proper application(s). The product is not sold as suitable for other applications - usage in such may cause risks not mentioned in this sheet. Do not use for other application(s) without seeking advice from manufacturer

The information provided about the product on this Safety Data Sheet has been compiled from knowledge of the individual constituents

The most up-to-date version of this MSDS can be found on www.wilhelmsen.com/shipsservice

OTHER CONTACT INFORMATION MAJOR CHEMICAL OFFICES

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SECTION 16 Other information (....)

