

SAFETY DATA SHEET

1 Identification of the substance or preparation and of the company/undertaking

Product Name: **BIOGUARD**
 Datasheet Number: 743880 6. 0. 0
 Use of the substance/preparation: Seawater treatment
 Product Part Number: 743880 (25 liter)
 Name of Supplier: Wilhelmsen Ships Service AS
 Address of Supplier: Willem Barentszstraat 50
 3165AB
 Rotterdam
 The Neherlands
 Telephone: +31 10 4877 777
 Fax: +31 10 4877 888
 Responsible Person: Patrick Rijsdijk, Product HSE Manager, Tel.: +31 6 349 440 35
 Email: Patrick.Rijsdijk@Wilhelmsen.com
 Name of Manufacturer: Unitor Chemicals AS
 Address of Manufacturer: PO Box 15
 N3141 Kjøpmannskjaer
 Norway
 Telephone: +47 33 35 15 00
 Emergency Telephone: ****ONLY TO BE USED IN CASE OF AN INCIDENT****
 NCEC: +44 1865 407333, CHEMTREC (800) 424 9300
 American Chemistry Council +1 703 527 3887,
 Greece +30 210 7793777

2 Hazards identification

- Odour: Characteristic odour
- Appearance: Liquid, pale yellow, soluble in water
- Contact with eyes: Risk of serious damage to eyes (R41)
- Contact with skin: Causes irritation
- Inhalation: Harmful by inhalation, in contact with skin and if swallowed (R20/21/22)
- Very toxic to aquatic organisms (R50)



Harmful



Dangerous for the Environment

3 Composition/information on ingredients

Chemical Name	Concentration	CAS Number	EC Number	R Phrases*	Symbols
Amines, N-tallowalkyl trimethylendi-, diacetates	>25	68911-78-4	272-786-5	22, 34, 50	C, N
2-Butoxyethanol	>25	111-76-2	203-905-0	20/21/22, 36/38	Xn
Amines, N-tallow alkylpropylenedi	>1	61791-55-7	263-189-0	22, 34, 50	C, N

*See Section 16

4 First aid measures

Contact with skin

- Remove contaminated clothing immediately and drench affected skin with plenty of water. Then wash with soap and water
- Seek medical attention if irritation persists
- Contaminated clothing should be laundered before reuse

Contact with eyes

- If substance has got into eyes, immediately wash out with plenty of water for at least 15 minutes
- Irrigate eyes thoroughly whilst lifting eyelids
- Seek medical advice

Ingestion

- Never make an unconscious person vomit or drink fluids
- Give water or milk to drink
- Do not induce vomiting
- Obtain immediate medical attention

Inhalation

- Inhalation is unlikely to occur
- Remove patient to fresh air

General

- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible) (S45)
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5 Fire-fighting measures

- Non combustible, Flash point > 100 deg C (CC)
 - Nitrogen and carbon oxides may be formed
 - Not flammable. In case of fire use extinguishing media appropriate to surrounding conditions
 - Smoke from fires is toxic. Take precautions to protect personnel from exposure
 - Use water spray or fog to knock down and absorb corrosive fumes
 - Prevent run off water from entering drains if possible
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6 Accidental release measures

Personal Precautions

- Wear protective clothing as per section 8

Environmental Precautions

- Do not allow to enter public sewers and watercourses

Immediate Actions

- Shut off source of leak if safe to do so

Clean Up Actions

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

Special Precautions

- Wear protective clothing as per section 8
 - No special precautions are required for this product
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7 Handling and storage

Handling

- The usual precautions for handling chemicals should be observed
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7 Handling and storage (....)

- Avoid contact with skin and eyes (S24/25)
- Eyewash bottles should be available

Storage

- Keep only in the original container in a cool, well ventilated place (S3/9/49)
 - Keep away from oxidising substances (S14)
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8 Exposure controls and personal protection

Exposure Limits

- There are no recommended or established controls for this product
- TLV (TWA) 50 mg/m³ (2-Butoxyethanol)

Exposure controls

- No special precautions are required for this product
- The undiluted product must not be used in a confined space without good ventilation

Occupational exposure controls

- Wear suitable protective clothing, including eye/face protection and gloves (plastic or rubber are recommended)
- Respiratory protection may be required under exceptional circumstances when excessive air contamination exists



Gloves



Suit



Goggles



No Smoking

9 Physical and chemical properties

- Odour: Characteristic odour
 - Appearance: Liquid, pale yellow, soluble in water
 - pH ~ 6 at 5 % concentration
 - Boiling point >100 °C at 760 mm /Hg
 - Vapour pressure - not known
 - Freezing point ± -15 °C at 760 mm/Hg
 - Completely soluble in water
 - Density 970 kg/m³ at 23 °C
 - Non combustible, Flash point > 100 deg C (CC)
 - Log Pow <0
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10 Stability and reactivity

- No hazardous decomposition products known
 - Avoid overheating, Keep away from frost
 - Incompatible with strong oxidizing substances
 - See Section 5
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11 Toxicological information

Toxicological information

- LD50 (oral,rat) 1673 mg/kg

Inhalation

- Harmful by inhalation (R20)
 - Vapours or aerosols may cause irritation of eyes, nose and respiratory tract
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11 Toxicological information (....)

Contact with skin

- Harmful in contact with skin (R21)
- Can be absorbed through skin
- Causes irritation

Contact with eyes

- Causes severe irritation
- Can cause damage to the eyes

Ingestion

- Harmful if swallowed (R22)
- The ingestion of significant quantities may cause gastro-intestinal disturbances

Carcinogenicity

- No evidence of carcinogenic effects

Mutagenicity

- No evidence of mutagenic effects
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12 Ecological information

Ecotoxicity

- EC50 (Skeletonema costatum) 0.35 mg/l (72 hr)
- LC50 (Acartia tonsa) 1 mg/l (48 hr)
- EC50 (daphnia) 0.31 mg/l (48 hr)
- This product contains components which are classified in the EU as dangerous for the environment.
- Very toxic to aquatic organisms (R50)

Mobility

- Completely soluble in water

Persistence and Biodegradability

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

Bioaccumulation Potential

- Bioaccumulation of the components in this product is insignificant.

Other Adverse Effects

- No environmental problems are expected when the product is used / handled correctly.
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13 Disposal considerations

Classification

- EU Waste class: 07.06

Disposal considerations

- 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
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14 Transport information



Dangerous Substance



Marine Pollutant

14 Transport information (....)

Proper Shipping Name: Environmentally hazardous substance, liquid, n.o.s. (contains alkyl diamine acetate)

Emergency Action Code

UN

Road/Rail (ADR/RID)

Proper Shipping Name:	Environmentally hazardous substance, liquid, n.o.s. (contains alkyl diamine acetate)		
ADR UN No.:	UN3082	ADR Hazard Class:	9
ADR Packing Group:	III	ADR subrisk:	N/A
ADR-RID Labels:	9 + Marine Pollutant	ADR Flashpoint:	N/A

Sea (IMDG)

Proper Shipping Name:	Environmentally hazardous substance, liquid, n.o.s. (contains alkyl diamine acetate)		
IMDG UN No.:	UN3082	IMDG Hazard Class.:	9
IMDG Pack Group.:	III	IMDG EmS:	F-A, S-F
IMDG subrisk:	N/A	IMDG Labels:	9 + Marine Pollutant
IMDG Flashpoint:	N/A		

Air (ICAO/IATA)

Proper Shipping Name:	Environmentally hazardous substance, liquid, n.o.s. (contains alkyl diamine acetate)		
ICAO Un No.:	3082	ICAO Hazard Class.:	9
ICAO Packing Group.:	III	ICAO subrisk:	N/A
ICAO Labels:	9 + Marine Pollutant	ICAO Flashpoint:	N/A

DOT / CFR (US Department of Transportation)

DOT Proper Shipping Name:	Environmentally hazardous substance, liquid, n.o.s. (contains alkyl diamine acetate)		
Hazardous Material:	contains alkyl diamine acetate	Hazard Class:	9
Identification Number:	UN3082	Product RQ (lbs):	N/A
DOT subrisk:	N/A	DOT Labels:	9
DOT Flashpoint:	N/A		

15 Regulatory information

Harmful



Dangerous for the Environment

Risk Phrases

- Harmful by inhalation, in contact with skin and if swallowed (R20/21/22)
- Irritating to skin (R38)
- Risk of serious damage to eyes (R41)
- Very toxic to aquatic organisms (R50)

Safety Phrases

- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice (S26)
- After contact with skin, wash immediately with plenty of water (S28)

15 Regulatory information (....)

- Wear suitable protective clothing, eye/face protection and gloves (S36/37/39)
 - Avoid release to the environment. Refer to special instructions/Safety data sheets (S61)
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16 Other information

Text of R and S phrase codes used in this safety data sheet:- 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; R50: Very toxic to aquatic organisms.

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

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

This Safety Data Sheet is provided in compliance with The Dangerous Substances Directive (67/548/EEC)

This Safety Data Sheet is provided in compliance with The Dangerous Preparations Directive (88/379/EEC)

This Safety Data Sheet is provided in compliance with The Safety Data Sheets Directive (2001/58EC)