

## SAFETY DATA SHEET

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

Product Name: **AUTOTREAT**  
 Datasheet Number: 698720 9. 0. 0  
 Use of the substance/preparation: Boiler water treatment  
 Product Part Number: 698720 (25 liter)  
 Head Office:: Wilhelmsen Ships Service AS  
 address: Strandveien 20, N1324 Lysaker, Norway Tel: (+47) 67 584550  
 Name of Supplier: Wilhelmsen Ships Service AS  
 Address of Supplier: Willem Barentszstraat 50  
 3165AB Rotterdam  
 The Netherlands  
 Telephone: +31 10 4877 777  
 Fax: +31 10 4877 888  
 Responsible Person: Patrick Rijdsdijk, Product HSE Manager, Tel.: +31 6 349 440 35  
 Email: Patrick.Rijdsdijk@Wilhelmsen.com  
 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



Corrosive

- Odour: Odourless
- Appearance: Liquid, pale yellow, soluble in water
- Contact with eyes: Prolonged skin or eye contact may cause chemical burns
- Contact with skin: Causes severe burns (R35)
- Inhalation: Severely irritating to respiratory system
- Ingestion: Can cause damage to the digestive system

### Classification of the substance or mixture

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

### Risk Phrases

- Causes severe burns (R35)
- Harmful by inhalation (R20)

### Safety Phrases

- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice (S26)
- Wear suitable gloves and eye/face protection (S37/39)
- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible) (S45)

## 3 Composition/information on ingredients

| Chemical Name       | Concentration | CAS Number | EC Number | R/H Phrases* | Symbols |
|---------------------|---------------|------------|-----------|--------------|---------|
| Potassium hydroxide | 5-10          | 1310-58-3  | 215-181-3 | 22, 35       | C       |

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

|                       |     |          |           |                  |    |
|-----------------------|-----|----------|-----------|------------------|----|
| 2-Diethylaminoethanol | 1-5 | 100-37-8 | 202-845-2 | 10, 20/21/22, 34 | C  |
| 2-Aminoethanol        | 1-5 | 141-43-5 | 205-483-3 | 20, 36/37/38     | Xn |

\*See Section 16

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### 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
- Obtain immediate medical attention
- Continue flushing with water until medical help arrives

#### Ingestion

- Do not induce vomiting
- Give plenty of water to drink
- Obtain immediate medical attention

#### Inhalation

- Inhalation is unlikely to occur
- Remove patient to fresh air
- Seek medical attention if ill effects occur

#### 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
  - Nitrogen and carbon oxides may be formed
  - Not flammable. In case of fire use extinguishing media appropriate to surrounding conditions
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### 6 Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

- Wear protective clothing as per section 8

#### Environmental Precautions

- Do not allow to enter public sewers and watercourses

#### Immediate Actions

- Contain spillage by any means possible

#### 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

#### Special Precautions

- Wear protective clothing as per section 8
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### 7 Handling and storage

#### Precautions for safe handling

- See Section 8
  - The usual precautions for handling chemicals should be observed
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## 7 Handling and storage (....)

- Eyewash bottles should be available
- Conditions for safe storage, including any incompatibilities
- Keep only in the original container in a cool, well ventilated place (S3/9/49)
  - Protect from frost
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## 8 Exposure controls/personal protection

Control parameters

- TLV (TWA) 1 ppm, 2.5 mg/m<sup>3</sup> (2-Aminoethanol)
- TLV (TWA) 2 ppm, 9.6 mg/m<sup>3</sup> (2-Diethylaminoethanol)
- TLV (TWA) 2 mg/m<sup>3</sup> (Potassium hydroxide)

Exposure controls

- No special precautions are required for this product

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



Goggles



Suit



No Smoking

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## 9 Physical and chemical properties

- Odour: Odourless
  - Appearance: Liquid, pale yellow, soluble in water
  - pH 13 at 100 % concentration
  - Boiling point >100 °C at 760 mm /Hg
  - Vapour pressure - not known
  - Freezing point <0 °C at 760 mm/Hg
  - Completely soluble in water
  - Specific gravity (water=1) 1.105 - 1.125
  - Non combustible
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## 10 Stability and reactivity

- This article is considered stable under normal conditions
  - Avoid overheating, Keep away from frost
  - See Section 5
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## 11 Toxicological information

Information on toxicological effects

- No experimental data available

Inhalation

- Inhalation is unlikely to occur
- May cause severe irritation

Contact with skin

- Causes severe burns (R35)

Contact with eyes

- Corrosive to eyes

Ingestion

- Can cause damage to the digestive system
-

## 11 Toxicological information (....)

### Carcinogenicity

- No evidence of carcinogenic effects

## 12 Ecological information

### Ecotoxicity

- May cause acute effects in the aquatic environment
- LC50 (golden orfe (*Leuciscus idus*)) (2-Diethylaminoetanol) >100 mg/l (96 hr)
- EC50 (daphnia) (2-Diethylaminoetanol) 86,6 mg/l (48 hr)
- EC50 (algae) (2-Diethylaminoetanol) 30 mg/l (72 hr)
- LC50 (fish) (goldfish)(2-Aminoetanol) 170 mg/l (96 hr)
- LC50 (golden orfe (*Leuciscus idus*)) (2-Aminoetanol) 224-525 mg/l (48 hr)
- EC50 (daphnia) (2-Aminoetanol) 10-100 mg/l (48 hr)

### Persistence and degradability

- The components in this product are readily biodegradable.
- Degrades by hydrolysis

### Bioaccumulation Potential

- Bioaccumulation of the components in this product is insignificant.

### Mobility in soil

- Completely soluble in water

### Other Adverse Effects

- No environmental problems are expected when the product is used / handled correctly. In its intended use, the product will not be released into the environment.

## 13 Disposal considerations

### 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

### Classification

- This material and/or its container must be disposed of as hazardous waste
- EU Waste class: 06-02-04

## 14 Transport information



Corrosive

Proper Shipping Name: Potassiumhydroxide, solution

### Road/Rail (ADR/RID)

|                       |                              |                   |   |
|-----------------------|------------------------------|-------------------|---|
| Proper Shipping Name: | Potassiumhydroxide, solution |                   |   |
| ADR UN No.:           | UN1814                       | ADR Hazard Class: | 8 |
| ADR Packing Group:    | II                           | ADR subrisk:      | - |
| ADR Flashpoint:       | -                            |                   |   |

### Sea (IMDG)

|                       |                              |                     |          |
|-----------------------|------------------------------|---------------------|----------|
| Proper Shipping Name: | Potassiumhydroxide, solution |                     |          |
| IMDG UN No.:          | UN1814                       | IMDG Hazard Class.: | 8        |
| IMDG Pack Group.:     | II                           | IMDG EmS:           | F-A, S-B |
| IMDG subrisk:         | -                            |                     |          |

## 14 Transport information (....)

### Air (ICAO/IATA)

|                       |                              |                     |   |
|-----------------------|------------------------------|---------------------|---|
| Proper Shipping Name: | Potassiumhydroxide, solution |                     |   |
| ICAO Un No.:          | UN1814                       | ICAO Hazard Class.: | 8 |
| ICAO Packing Group.:  | II                           | ICAO subrisk:       | - |
| ICAO Flashpoint:      | -                            |                     |   |

### DOT / CFR (US Department of Transportation)

|                           |                              |                        |        |
|---------------------------|------------------------------|------------------------|--------|
| DOT Proper Shipping Name: | Potassiumhydroxide, solution |                        |        |
| Hazardous Material:       | Potassiumhydroxide           |                        |        |
| Hazard Class:             | 8                            | Identification Number: | UN1814 |
| Product RQ (lbs):         | -                            | DOT subrisk:           | -      |
| DOT Flashpoint:           | -                            |                        |        |

### Special precautions for user

- Forbidden on passenger aircraft
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## 15 Regulatory information

### Classification and labelling

- This substance is covered by The Dangerous Substances Directive (67/548/EEC) as amended
- Council Directive 1999/45/EEC Classification, packing and labelling of dangerous preparations.

### 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.
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## 16 Other information

Text of R and S phrase codes used in this safety data sheet:- R10: Flammable; R20: Harmful by inhalation; R20/21/22: Harmful by inhalation, in contact with skin and if swallowed; R22: Harmful if swallowed; R34: Causes burns; R35: Causes severe burns; R36/37/38: Irritating to eyes, respiratory system and skin.

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