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**SAFETY DATA SHEET**

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**SECTION 1 Identification of the substance or preparation and of the company/undertaking****1.1 Product identifier**

- Product Name: MULTIPLUS
- Product Part Number: 777709 (25Ltr plastic)

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

- Use of the substance/preparation: Water treatment

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

Name of Supplier:

Head Office:

Wilhelmsen Ships Service AS  
Strandveien 20, N1324 Lysaker,  
Norway Tel: (47) 6349 440 35

Supplier:

Wilhelmsen Ships Service AS  
Willem Barentszstraat 50  
3165AB Rotterdam  
Telephone: +31 4877 777  
Fax: +31 4877 888  
The Netherlands

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**

Emergency Telephone: -ONLY TO BE USED IN CASE OF AN INCIDENTNCEC:+

44 1865 407333, CHEMTREC (800) 424 9300

American Chemistry Council +1 703 527 3887,

Greece +30 210 7793777Australia: +61 3 9630 0998

Giftinformasjonsentralen in Norway Tel.: +47 22591300

Wilhelmsen Ships Service, Melbourne, AUSTRALIA Emergency 24hrs: +61 3 9630 0998

**\*\*FOR QUOTATIONS PLEASE CONTACT YOUR LOCAL CUSTOMER SERVICES\*\*****SECTION 2 Hazards identification****2.1 Classification of the substance or mixture**

- Council Directive 1999/45/EEC Classification, packing and labelling of dangerous preparations.
- Refer to current The Dangerous Substances Directive (67/548/EEC)
- Symbols: C
- Causes severe burns (R35)
- Harmful if swallowed (R22)
- 
- Regulations 1272/2008/EEC. Classification, labeling and packing of dangerous substances and preparations
- Symbols: GHS05, GHS07
- Signal Word: Danger

**SECTION 2 Hazards identification (....)**

- Skin Corr. 1B
- Acute Tox. 4
- STOT SE 3
- Met. Corr. 1

**2.2 Label elements**

- Signal Word: Danger
- Skin Corr. 1B
- STOT SE 3
- Met. Corr. 1
- Acute Tox. 4
- 
- Contains:
  - potassium hydroxide - 2-aminoethanol - sodium hydrogensulphite . . . %
  -
- Hazard phrases
  - Causes severe skin burns and eye damage (H314).
  - Harmful if swallowed (H302).
  - Harmful in contact with skin (H312).
  - Harmful if inhaled (H332).
  - May cause respiratory irritation (H335).
  - May be corrosive to metals (H290).
- Precautionary Phrases
  - Wear protective gloves/protective clothing/eye protection/face protection (P280).
  - Avoid breathing dust/fume/gas/mist/vapours/spray (P261).
  - 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 SWALLOWED: rinse mouth. Do NOT induce vomiting (P301+P330+P331).
  - Immediately call a POISON CENTER or doctor/physician (P310).
  - IF ON CLOTHING: rinse immediately contaminated clothing and skin with plenty of water before removing clothes (P306+P360).
  - IF ON SKIN: Wash with plenty of soap and water (P302+P352).

**2.3 Other hazards**

- Not applicable
- Not a PBT according to REACH Annex XIII
- Odour: Characteristic odour
- Appearance: Liquid, clear, tan

**SECTION 3 Composition/information on ingredients****3.1 Mixtures**

- potassium hydroxide
  - Concentration: 10-25%
  - CAS Number: 1310-58-3
  - EC Number: 215-181-3
  - Symbols: C, GHS07, GHS05
  - R/H Phrases: R22, R35 - H302, H290, H314
  - Categories: Acute Tox. 4, Met. Corr. 1, Skin Corr. 1A
- 2-aminoethanol
  - Concentration: 5-10%
  - CAS Number: 141-43-5
  - EC Number: 205-483-3

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

- Symbols: C, GHS07, GHS05  
R/H Phrases: R20/21/22, R34 - H302, H312, H314, H335  
Categories: Acute Tox. 4, Skin Corr. 1B, STOT SE 3
- sodium hydrogensulphite . . . %  
Concentration: 1-5%  
CAS Number: 7631-90-5  
EC Number: 231-548-0  
Symbols: Xn, GHS07  
R/H Phrases: R22, R31 - H302  
Categories: Acute Tox. 4
- 

**SECTION 4 First aid measures**

## 4.1 Description of first aid measures

- IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower (P303+P361+P353).
- IF ON CLOTHING: rinse immediately contaminated clothing and skin with plenty of water before removing clothes (P306+P360).
- When in doubt or symptoms persist, seek medical attention
- 
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing (P305+P351+P338).
- Obtain immediate medical attention
- 
- IF SWALLOWED: rinse mouth. Do NOT induce vomiting (P301+P330+P331).
- Give plenty of water to drink
- Never make an unconscious person vomit or drink fluids
- Obtain immediate medical attention
- 
- IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing (P304+P341).
- When in doubt or symptoms persist, seek medical attention

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

- Can cause damage to the eyes, skin and mucous membranes
- The ingestion of significant quantities may cause damage to digestive system

## 4.3 Indication of any immediate medical attention and special treatment needed

- No information available
- 

**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
- Carbon oxides may be formed
- Nitrogen oxides may be formed

## 5.3 Advice for firefighters

- Wear chemical protection suit and positive-pressure breathing apparatus
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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
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**SECTION 6 Accidental release measures (....)**

- Wash thoroughly after dealing with spillage
- Shut off source of leak if safe to do so

**6.2 Environmental Precautions**

- Do not allow to enter public sewers and watercourses

**6.3 Methods and material for containment and cleaning up**

- Ventilate the area and wash spill site after material pick-up is complete
- Absorb spillage in earth or sand

**6.4 Reference to other sections**

- See Section 13
- 

**SECTION 7 Handling and storage****7.1 Precautions for safe handling**

- Avoid breathing dust/fume/gas/mist/vapours/spray (P261).
- 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**

- Avoid contact with acid
- Store in a well-ventilated place. Keep cool (P403+P235).
- Store in a dry place (P402).

**7.3 Specific end use(s)**

- Contact supplier for further information
- 

**SECTION 8 Exposure controls/personal protection****8.1 Control parameters**

- potassium hydroxide  
WEL (short term) 2 mg/m<sup>3</sup>
- 2-aminoethanol  
TLV (TWA) 2.5 mg/m<sup>3</sup> ( )
- sodium hydrogensulphite . . . %  
WEL (long term) 5 mg/m<sup>3</sup>

**8.2 Exposure controls**

- No special precautions are required for this product

**8.3 Occupational exposure controls**

- Eyewash bottles should be available
  - Wear goggles giving complete eye protection
  - Wear suitable protective clothing, including eye/face protection and gloves (neoprene or nitrile 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
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**SECTION 9 Physical and chemical properties**

**SECTION 9 Physical and chemical properties (....)**

## 9.1 Information on basic physical and chemical properties

- Odour: Characteristic odour
- Appearance: Liquid, clear, tan
- pH 13-14
- Completely soluble in water
- Density 1.21 - 1.23 g/cm<sup>3</sup> at 20 deg C
- Flash point >62 deg C (CC)
- Boiling Point/Range: Boiling point 100 °C

## 9.2 Other information

- None
- 

**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 overheating

## 10.5 Hazardous Decomposition Products

- Decomposition products may include toxic and irritant fumes
  - In case of fire: (P370)
  - Decomposition products may include amines
  - Decomposition products may include Nitrous gases (NOX)
  - Decomposition products may include carbon oxides
- 

**SECTION 11 Toxicological information**

## 11.1 Information on toxicological effects

- LD50 (oral,rat) (Potassium Hydroxide) 365 mg/kg
- LD50 (oral,rat) (2-aminoethanol) 1515 mg/kg
- LD50 (skin,rat) (2-aminoethanol) 1025 mg/kg

## 11.2 Contact with eyes

- Causes burning sensation
- Can cause damage to the eyes

## 11.3 Contact with skin

- Causes redness and irritation
- Can cause damage to the skin

## 11.4 Ingestion

- Not regarded as a potential route of exposure.
- The ingestion of significant quantities may cause damage to mucous membranes
- Can cause damage to the stomach lining

## 11.5 Inhalation

- Causes severe irritation
- 

**SECTION 12 Ecological information**

**SECTION 12 Ecological information (....)**

## 12.1 Toxicity

- LC50 (fish) (2-aminoethanol) 329 mg/l (96 hr)
- Biodegradability. OECD-test. 28 days >60 % (2-aminoethanol)
- This product contain an acidic component which may cause a low pH-value. Effect depends on waterquality and the organisms tolerance due to pH-value
- This product does not contain ingredients which are classified in the EU as dangerous for the environment.

## 12.2 Persistence and degradability

- The components in this product are readily biodegradable.

## 12.3 Bioaccumulation Potential

- No information available

## 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
- 

**SECTION 13 Disposal considerations**

## 13.1 Waste treatment methods

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

## 13.2 Classification

- EU Waste class: 06-02
- 

**SECTION 14 Transport information**

## 14.1 UN

- UN No.: UN1814
- Proper Shipping Name: POTASSIUM HYDROXIDE SOLUTION
- Hazard Class: 8
- Packing Group: II

## 14.2 Environmental hazards

- Presents no hazard to the environment

## 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.: UN1814
  - Proper Shipping Name: POTASSIUM HYDROXIDE SOLUTION
  - ADR Hazard Class: 8
  - ADR subrisk:
  - ADR Packing Group: II
  - ADR Flashpoint:
-

**SECTION 14 Transport information (....)**

## 14.6 Sea (IMDG)

- IMDG UN No.: UN1814
- Proper Shipping Name: POTASSIUM HYDROXIDE SOLUTION
- IMDG Hazard Class: 8
- IMDG subrisk:
- IMDG Pack Group.: II
- IMDG EmS: F-A, S-B
- IMDG Flashpoint:

## 14.7 Air (ICAO/IATA)

- ICAO Un No.: UN1814
- Proper Shipping Name: POTASSIUM HYDROXIDE SOLUTION
- ICAO Packing Group: II
- ICAO Hazard Class: 8
- ICAO subrisk:
- ICAO Flashpoint:

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

- Identification Number: UN1814
  - DOT Proper Shipping Name: POTASSIUM HYDROXIDE SOLUTION
  - DOT Labels:
  - Product RQ (lbs):
  - Hazardous Material: potassium hydroxide
  - Hazard Class: 8
  - DOT subrisk:
  - DOT Flashpoint:
- 

**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 current The Dangerous Substances Directive (67/548/EEC)
- Regulations 1272/2008/EEC. Classification, labeling and packing of dangerous substances and preparations
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- Norwegian Productregistration no: 308502

## 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:- H290: May be corrosive to metals. H302: Harmful if swallowed. H312: Harmful in contact with skin. H314: Causes severe skin burns and eye damage. H335: May cause respiratory irritation. R20/21/22: Harmful by inhalation, in contact with skin and if swallowed. R22: Harmful if swallowed. R31: Contact with acids liberates toxic gas. R34: Causes burns. R35: Causes severe burns.

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

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**SECTION 16 Other information (....)**

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](http://www.wilhelmsen.com/shipsservice)

**OTHER CONTACT INFORMATION MAJOR CHEMICAL OFFICES**

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Tel: +61 3 9630 0900 Emergency 24hrs: +61 3 9630 0998

Wilhelmsen Ships Service INC 210 Edgewater Street US-10305 Staten Island New York United States  
Telephone daytime: (+1) 718 815 1310 Fax: (+1) 718 233 3268

Wilhelmsen Ships Service INC 2200 W. Pacific Coast Highway US-90810 Long Beach California, United States Tel (+1) 562 624 8888 Fax (+1) 562 624 1011

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Telephone daytime: (+1) 281 867 2000 Fax: (+1) 281 867 2800

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