
SAFETY DATA SHEET

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

- Product Name: BWT LIQUID PLUS
- Product Part Number: 777701

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: GHS07, GHS05
- Signal Word: Danger

SECTION 2 Hazards identification (....)

- Acute Tox. 4
- Skin Corr. 1B
- Met. Corr. 1
- Harmful if swallowed (H302).
- Causes severe skin burns and eye damage (H314).
- May be corrosive to metals (H290).

2.2 Label elements



- Signal Word: Danger
- Acute Tox. 4
- Skin Corr. 1B
- Met. Corr. 1
-
- Contains:
- potassium hydroxide
- Tetrapotassiumpyrophosphate
-
- Hazard phrases
- Harmful if swallowed (H302).
- Causes severe skin burns and eye damage (H314).
- May be corrosive to metals (H290).
- Precautionary Phrases
- 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 SWALLOWED: rinse mouth. Do NOT induce vomiting (P301+P330+P331).
- Immediately call a POISON CENTER or doctor/physician (P310).
- IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower (P303+P361+P353).

2.3 Other hazards

- Not applicable
- Not a PBT according to REACH Annex XIII
- Odour: Odourless
- Appearance: Liquid, off-white, soluble in water

SECTION 3 Composition/information on ingredients

3.1 Mixtures

- Potassium hydroxide
- Concentration: 10-30%
- CAS Number: 1310-58-3
- EC Number: 215-181-3
- Symbols: C, GHS07, GHS05
- R/H Phrases: R22, R35 - H302, HH290, H314
- Categories: Acute Tox. 4, Met. Corr. 1, Skin Corr. 1A
- Tetrapotassiumpyrophosphate
- Concentration: 10-30%
- CAS Number: 7320-34-5
- EC Number: 230-785-7
- Symbols: Xi, GHS07
- R/H Phrases: R36 - H319
- Categories: Eye Irrit. 2

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).
- Seek medical attention if irritation persists
- Wash contaminated clothing before reuse (P363).
-
- 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
- Obtain immediate medical attention
- Continue flushing with water until medical help arrives
-
- IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician (P301+P310).
- Rinse mouth (P330).
- 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).
- Inhalation is unlikely to occur

4.2 Most important symptoms and effects, both acute and delayed

- Can cause damage to the eyes, skin and mucous membranes
- Prolonged skin or eye contact may cause chemical burns
- Causes redness and irritation

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

- Reaction products may include nitrogen and carbon oxides

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
-

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

SECTION 7 Handling and storage

7.1 Precautions for safe handling

- See Section 8
- The usual precautions for handling chemicals should be observed
- Eyewash bottles should be available

7.2 Conditions for safe storage, including any incompatibilities

- Store in a dry place. Store in a closed container (P402+P404).
- Store in a well-ventilated place (P403).
- Protect from frost

7.3 Specific end use(s)

- Contact supplier for further information
-

SECTION 8 Exposure controls/personal protection

8.1 Control parameters

- TLV (TWA) 2 mg/m³ (Potassium hydroxide)

8.2 Exposure controls

- No special precautions are required for this product

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: Odourless
- Appearance: Liquid, pale yellow, soluble in water
- pH 14
- Boiling point >100 °C to 760 °C
- Vapour pressure - not known
- Completely soluble in water
- Density: Density 1,46 - 1,50 g/cm³ at 20 deg C

9.2 Other information

- No information available
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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
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SECTION 10 Stability and reactivity (....)

10.3 Incompatible materials

- Incompatible with acid
- Incompatible with strong oxidizing substances

10.4 Conditions to avoid

- Avoid contact with aluminium
- Avoid contact with zinc
- Avoid contact with galvanised metals
- Avoid overheating
- Keep away from frost

10.5 Hazardous Decomposition Products

- No hazardous decomposition products known
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SECTION 11 Toxicological information

11.1 Information on toxicological effects

- Not applicable

11.2 Contact with eyes

- Corrosive to eyes

11.3 Contact with skin

- Causes redness and irritation
- In cases of severe exposure, blistering of the skin may develop

11.4 Ingestion

- Can cause damage to the digestive system

11.5 Inhalation

- Inhalation is unlikely to occur
 - May cause severe irritation
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SECTION 12 Ecological information

12.1 Toxicity

- This product contains an alkaline substance which may cause a high 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

- 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
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SECTION 13 Disposal considerations (....)

- Disposal should be in accordance with local, state or national legislation

13.2 Classification

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

SECTION 14 Transport information**14.1 UN**

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

14.2 Environmental hazards

- On available data, substance is not harmful 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: Potassiumhydroxide, solution
- ADR Hazard Class: 8
- ADR subrisk: -
- ADR Packing Group: II
- ADR Flashpoint: -

14.6 Sea (IMDG)

- IMDG UN No.: UN1814
- Proper Shipping Name: Potassiumhydroxide, 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: Potassiumhydroxide, 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: Potassiumhydroxide, solution
- DOT Labels: 8
- Product RQ (lbs): -
- Hazardous Material: Potassiumhydroxide
- Hazard Class: 8
- DOT subrisk: -

SECTION 14 Transport information (....)

- DOT Flashpoint: -
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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.
- Refer to current The Dangerous Substances Directive (67/548/EEC)
- Council Directive 1999/45/EEC Classification, packing and labelling of dangerous preparations.
- Regulations 1272/2008/EEC. Classification, labeling and packing of dangerous substances and preparations
-
- Norwegian Productregistration no: 308506

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. H314: Causes severe skin burns and eye damage. H319: Causes serious eye irritation. R22: Harmful if swallowed. R35: Causes severe burns. R36: Irritating to eyes.

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

SECTION 16 Other information (....)

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

OTHER CONTACT INFORMATION MAJOR CHEMICAL OFFICES

Wilhelmsen Ships Service Level 17, 636 St Kilda Road Melbourne Vic 3004 AUSTRALIA
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

Wilhelmsen Ships Service INC 701 Ashland Ave. Ashland Center Two, Bay 12 US- 19032 Folcroft
Pennsylvania United States Tel (+1) 610 586 7801 Fax (+1) 215 701 0646

Wilhelmsen Ships Service INC. 9400 New Century Drive US-77507 Pasadena Texas United States
Telephone daytime: (+1) 281 867 2000 Fax: (+1) 281 867 2800

Wilhelmsen Ships Service Ltd. Unit 3A NewtonsCourt Crossways DA2 6QL Dartford, Kent United
Kingdom Tel (+44) 1322 282 412 Fax (+44) 1322 284 774

Wilhelmsen Ships Service Ltda Rua Bispo Lacerda nos.61/67 Del Catilho BR 21051120 Rio de Janeiro
Brazil Tel (+55) 21 25 82 8000 Fax (+55) 21 25 82 8001

Wilhelmsen Ships Service (S) Pte Ltd 186 Pandan Loop Singapore 128376 Tel (+65) 6395 4545

Wilhelmsen Ships Service Co., Ltd 12-31 Torihama-cho Kanazawa-ku Yokohama-shi JP-236 0002,
Japan Tel (+81) 45 775 0012 Fax (+81) 45 775 0070

Wilhelmsen Ships Service Hellas SA 100, D. Moutsopoulou & Serifou str GR-185 41 Piraeus Greece
Tel (+ 30) 210 4239100 Fax (+ 30) 210 4212480

Wilhelmsen Ships Service AS U.A.E . FI 24 Executive Heights, Tecom C Sheikh Zayed Road (East)
Dubai United Arab Emirates Tel (+971) 4 382 3888

Wilhelmsen Ships Service AS, Willem Barentszstraat 50 3165 AB Rotterdam-Albrandswaard,
the Netherlands. Tel (+31) 10 4877 777

