

SAFETY DATA SHEET

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

- 1.1 Product identifier
 - Product Name: OXYGEN CONTROL
 - Product Part Number: 571315 (25 liter)
- 1.2 Relevant identified uses of the substance or mixture and uses advised against
 - Use of the substance/preparation:
 - Boiler 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

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- 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
 - Counsil Directive 1999/45/EEC Classification, packing and labelling of dangerous preparations.
 - Refer to current The Dangerous Substances Directive (67/548/EEC)
 - Symbols: T, N
 - Toxic by inhalation, in contact with skin and if swallowed (R23/24/25)
 - Causes burns (R34)
 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment (R50/53)
 - May cause sensitisation by skin contact (R43)
 - May cause cancer (R45)

SECTION 2 Hazards identification (....)

- Regulations 1272/2008/EEC. Classification, labeling and packing of dangerous substances and preparations
- Symbols: GHS05, GHS08, GHS09, GHS06
- Signal Word: Danger
- Acute Tox. 3
- Aquatic Chronic 1
- Skin Sens. 1
- Carc. 1B
- Skin Corr. 1B
- Toxic if swallowed (H301).
- Toxic in contact with skin or if inhaled (H311+H331)
- May cause an allergic skin reaction (H317).
- May cause cancer (H350).
- Causes severe skin burns and eye damage (H314).
- Toxic to aquatic life with long lasting effects (H411).

2.2 Label elements









- Signal Word: Danger
- Skin Sens. 1
- Carc. 1B
- Skin Corr. 1B
- Acute Tox. 3
- Aquatic Chronic 1
- Contains:
- hydrazine
- _
- Hazard phrases

Toxic if swallowed (H301).

Toxic in contact with skin or if inhaled (H311+H331)

Very toxic to aquatic life with long lasting effects (H410).

May cause an allergic skin reaction (H317).

May cause cancer (H350).

Causes severe skin burns and eye damage (H314).

- Precautionary Phrases

Obtain special instructions before use (P201).

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: Immediately call a POISON CENTER or doctor/physician (P301+P310). IF exposed: Call a POISON CENTER or doctor/physician (P307+P311).

Dispose of contents/container to an authorised waste collection point (P501)

2.3 Other hazards

- Not applicable
- Not a PBT according to REACH Annex XIII
- Odour: Smells of ammonia
- Appearance: Liquid, colourless, soluble in water

SECTION 3 Composition/information on ingredients

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

3.1 Mixtures

- Hydrazine

Concentration: 10-30% CAS Number: 302-01-2 EC Number: 206-114-9

Symbols: T, N, GHS05, GHS09, GHS08, GHS06

R/H Phrases: R45, R10, R23/24/25, R34, R43, R50/53 - H301, H311, H331, H314, H317,

H350, H400, H410, H226

Categories: Acute Tox. 3, Skin Corr. 1B, Skin Sens. 1, Carc. 1B, Aquatic Acute 1, Aquatic

Chronic 1, Flam. Liq. 3

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).
- Wash contaminated clothing before reuse (P363).
- When in doubt or symptoms persist, seek medical attention

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- 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

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- 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

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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).
- Seek medical attention if irritation persists
- 4.2 Most important symptoms and effects, both acute and delayed
 - The ingestion of significant quantities may cause chemical oedema
 - Prolonged skin or eye contact may cause chemical burns
 - Causes redness and irritation
 - Can cause damage to the eyes, skin and mucous membranes
- 4.3 Indication of any immediate medical attention and special treatment needed

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
 - Decomposition products may include nitrogen oxides
 - Smoke from fires is toxic. Take precautions to protect personnel from exposure
- 5.3 Advice for firefighters
 - Wear chemical protection suit and positive-pressure breathing apparatus

SECTION 6 Accidental release measures

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
 - Neutralise with Sodium hypochlorite
- 6.4 Reference to other sections
 - None

SECTION 7 Handling and storage

- 7.1 Precautions for safe handling
 - Wear protective clothing as per section 8
 - Eyewash bottles should be available
- 7.2 Conditions for safe storage, including any incompatibilities
 - Store in a well-ventilated place. Keep container tightly closed (P403+P233).
- 7.3 Specific end use(s)
 - Contact supplier for further information

SECTION 8 Exposure controls/personal protection

- 8.1 Control parameters
 - WEL (long term) (Sk) 0.03 mg/m3
 - WEL (short term) (Sk) 0.13 mg/m3
- 8.2 Exposure controls
 - The undiluted product must not be used in a confined space without good ventilation
- 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 trough time has to be found out by the m
 - The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
- Eyewash bottles should be available
- Wear suitable respiratory protection
- Wear suitable respiratory protection. Gas cartridge (organic substances).

SECTION 9 Physical and chemical properties

- 9.1 Information on basic physical and chemical properties
 - Odour: Smells of ammonia
 - Appearance: Liquid, colourless, soluble in water
 - pH 12 at 100 % concentration
 - Boiling point 109 °C
 - Non combustible
 - Density: Density 1.0 1.01 g/cm3 at 20 deg C

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

- Flash point > 100 deg C (CC)
- Melting point/Range: Melting point -14 °C
- Partition Coefficient (n-Octanol/Water): Log Pow -1,37
- 9.2 Other information
 - No information available

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 acid
 - Incompatible with strong oxidizing substances
- 10.4 Conditions to avoid
 - Avoid overheating
- 10.5 Hazardous Decomposition Products
 - Decomposition products may include nitrogen oxides

SECTION 11 Toxicological information

- 11.1 Information on toxicological effects
 - LD50 (oral,rat) 173 mg/kg
 - LCLo (inhalation): (rat) (Hydrazine) 759 mg/l/4h
- 11.2 Contact with eyes
 - Prolonged skin or eye contact may cause chemical burns
- 11.3 Contact with skin
 - Prolonged skin or eye contact may cause chemical burns
- 11.4 Ingestion
 - Can cause damage to the digestive system
- 11.5 Inhalation
 - In cases of severe exposure, severe irritation may develop

SECTION 12 Ecological information

- 12.1 Toxicity
 - LC50 (fish) (Hydrazine) 0,61 5,98 mg/l (96 hr)
 - IC50 (algae) (Hydrazine) 0,071 mg/l (96 hr)
 - EC50 (daphnia) (Hydrazine) 0,81 mg/l (48 hr)
 - This product contains components which are classified in the EU as dangerous for the environment.
 - When hydrazine is released to the environment, it will react with oxygen to decompose into water and nitrogen, till this reaction is complete, the product is toxic to aquatic organisms.
- 12.2 Persistence and degradability
 - Degrades rapidly on exposure to air
- 12.3 Bioaccumulation Potential
 - Bioaccumulation of the components in this product is insignificant.

SECTION 12 Ecological information (....)

- 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
 - 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: 06.02.05
 - This material and/or its container must be disposed of as hazardous waste

SECTION 14 Transport information





14.1 UN

- UN No.: UN3293
- Proper Shipping Name: Hydrazine, aqueous solution, with not more than 37% hydrazine
- Hazard Class: 6.1
- Packing Group: III
- 14.2 Environmental hazards
 - ENVIRONMENTALLY HAZARDOUS
 - Marine pollutant
- 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.: UN3293
 - Proper Shipping Name: Hydrazine, aqueous solution, with not more than 37% hydrazine
 - ADR Hazard Class: 6.1
 - ADR subrisk: -
 - ADR Packing Group: III
 - ADR Flashpoint: -
- 14.6 Sea (IMDG)
 - IMDG UN No.: UN3293
 - Proper Shipping Name: Hydrazine, aqueous solution, with not more than 37% hydrazine-
 - IMDG Hazard Class: 6.1
 - IMDG subrisk: -
 - IMDG Pack Group.: III
 - IMDG EmS: F-A, S-A
 - IMDG Flashpoint: -

SECTION 14 Transport information (....)

14.7 Air (ICAO/IATA)

- ICAO Un No.: UN3293
- Proper Shipping Name: Hydrazine, aqueous solution, with not more than 37% hydrazine
- ICAO Packing Group: III
- ICAO Hazard Class: 6.1
- ICAO subrisk: -
- ICAO Flashpoint: -

14.8 DOT / CFR (US Department of Transportation)

- Identification Number: III
- DOT Proper Shipping Name: Hydrazine, aqueous solution, with not more than 37% hydrazine
- DOT Labels: 6.1+MAR POL.
- Product RQ (lbs): -
- Hazardous Material: UN3293
- Hazard Class: 6.1DOT 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.
- Counsil 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
- Norwegian Productregistration no: 15801
- ***SUBSTANCES OF VERY HIGH CONCERN (SVHC) ACCORDING TO REACH, ARTICLE 57***: CAS: 302-01-2 Hydrazine

15.2 Chemical Safety Assessment

- None

SECTION 16 Other information

Text not given with phrase codes where they are used elsewhere in this safety data sheet:- H226: Flammable liquid and vapour. H301: Toxic if swallowed. H311: Toxic in contact with skin. H314: Causes severe skin burns and eye damage. H317: May cause an allergic skin reaction. H331: Toxic if inhaled. H350: May cause cancer. H400: Very toxic to aquatic life. H410: Very toxic to aquatic life with long lasting effects. R10: Flammable. R23/24/25: Toxic by inhalation, in contact with skin and if swallowed. R34: Causes burns. R43: May cause sensitisation by skin contact. R45: May cause cancer. R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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

SECTION 16 Other information (....)

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

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

