

SAFETY DATA SHEET

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

- 1.1 Product identifier
 - Product Name: CONDENSATE CONTROL
 - Product Part Number: 774828 (25 liter)
- 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

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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,

One are 120 040 7700777 Ametrolic 104 2 0000

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: C
 - Causes burns (R34)
 - Regulations 1272/2008/EEC. Classification, labeling and packing of dangerous substances and preparations
 - Symbols: GHS07, GHS05
 - Signal Word: Danger
 - Acute Tox. 4

SECTION 2 Hazards identification (....)

- Skin Corr. 1B
- STOT SE 3
- Harmful if swallowed (H302).
- Harmful in contact with skin (H312).
- Harmful if inhaled (H332).
- Causes severe skin burns and eye damage (H314).
- May cause respiratory irritation (H335).

2.2 Label elements





- Signal Word: Danger
- Acute Tox. 4
- Skin Corr. 1B
- STOT SE 3

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- Contains:
- 2-aminoethanol
- 2-diethylaminoethanol

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- Hazard phrases
 - Harmful if swallowed (H302).
 - Harmful if inhaled (H332).
 - Harmful in contact with skin (H312).
 - Causes severe skin burns and eye damage (H314).
 - May cause respiratory irritation (H335).
- 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 eye irritation persists: Get medical advice/attention (P337+P313).

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician (P301+P310).

2.3 Other hazards

- Not applicable
- Not a PBT according to REACH Annex XIII
- Odour: Amine odour
- Appearance: Liquid, pale yellow, miscible with water

SECTION 3 Composition/information on ingredients

3.1 Mixtures

- 2-Aminoethanol

Concentration: 5-10% CAS Number: 141-43-5 EC Number: 205-483-3 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

 2-Diethylaminoethanol Concentration: 1-5% CAS Number: 100-37-8 EC Number: 202-845-2

Symbols: C, GHS02, GHS07, GHS05

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

R/H Phrases: R10, R20/21/22, R34 - H226, H302, H312, H332, H314

Categories: Flam. Liq. 3, Acute Tox. 4, Skin Corr. 1B

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).
 - 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).
 - Get immediate medical advice/attention (P315).
 - 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
 - Never make an unconscious person vomit or unit huids
 - 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
 - The ingestion of significant quantities may cause gastro-intestinal disturbances
 - Mildly irritating to respiratory system
 - Can cause damage to the eyes, skin and mucous membranes
- 4.3 Indication of any immediate medical attention and special treatment needed
 - No information available

SECTION 5 Fire-fighting measures

- 5.1 Extinguishing media
 - In case of fire: use water, alcohol resistant foam or dry agent for extinction (P370+P378)
- 5.2 Special hazards arising from the substance or mixture
 - 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

- 6.1 Personal precautions, protective equipment and emergency procedures
 - Wear protective clothing as per section 8
- 6.2 Environmental Precautions
 - Avoid release to the environment (P273).
 - Do not flush spilt material into any public water system
- 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
 - Place in sealable container
 - Seal containers and label them
 - Remove contaminated material to safe location for subsequent disposal

SECTION 6 Accidental release measures (....)

- 6.4 Reference to other sections
 - See Section 13

SECTION 7 Handling and storage

- 7.1 Precautions for safe handling
 - Eyewash bottles should be available
 - Do not get in eyes, on skin, or on clothing (P262).
 - See Section 8
 - Wear protective clothing as per section 8
- 7.2 Conditions for safe storage, including any incompatibilities
 - Store in a dry place. Store in a closed container (P402+P404).
 - Store in a closed container (P404).
- 7.3 Specific end use(s)
 - Contact supplier for further information

SECTION 8 Exposure controls/personal protection

- 8.1 Control parameters
 - 2-Aminoethanol
 - TLV (TWA) 2.5 mg/m3 ()
 - 2-Diethylaminoethanol
 - TLV (TWA) 50 mg/m3 ()
- 8.2 Exposure controls
 - Engineering controls should be provided which maintain airborne concentrations as low as practicable
- 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 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: Amine odour
 - Appearance: Liquid, pale yellow, soluble in water
 - pH 11.5 12.5 at 100 % concentration
 - Boiling point ~ 100 °C to 760 °C
 - Completely soluble in water
 - Density 0.99 1.101 g/cm3 at 20 deg C
 - Flash point > 62 deg C (CC)
- 9.2 Other information

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
- 10.4 Conditions to avoid
 - Avoid overheating
- 10.5 Hazardous Decomposition Products
 - Decomposition products may include nitrogen and carbon oxides

SECTION 11 Toxicological information

- 11.1 Information on toxicological effects
 - LD50 (oral,rat) (2-Aminoethanole) 1515 mg/kg
 - LD50 (skin,rat) (2-aminoethanol) 4Hrs 1025 mg/kg
 - LD50 (oral,rat) (2-dietylaminoetanol) 1320 mg/kg
 - LD50 (skin,rat) (2-diehtylaminoethanol) 1100 mg/kg
- 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
 - The ingestion of significant quantities may cause gastro-intestinal disturbances
 - The ingestion of significant quantities may cause damage to mucous membranes
- 11.5 Inhalation
 - In cases of severe exposure, irritation may develop

SECTION 12 Ecological information

- 12.1 Toxicity
 - LC50 (fish) (2-aminoethanol) 329 mg/l (96 hr)
 - LC50 (fish) (2-diethylaminoethanol 147 mg/l (96 hr)
 - Biodegradability. OECD-test. 28 days >60 % (2-diethylaminoethanol)
 - Biodegradability. OECD-test. 28 days >60 % ((2-aminoethanol))
- 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
 - Not applicable

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: 07.07.99
- This material and/or its container must be disposed of as hazardous waste

SECTION 14 Transport information



14.1 UN

- UN No.: UN2735
- Proper Shipping Name: Amines, liquid, corrosive, N.O.S.(2-aminoethanol, 2-diethylaminoethanol mixture)
- Hazard Class: 8
- Packing Group: III

14.2 Environmental hazards

- Presents little or 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.: UN2735
- Proper Shipping Name: Amines, liquid, corrosive, N.O.S.(2-aminoethanol, 2-diethylaminoethanol mixture)
- ADR Hazard Class: 8
- ADR subrisk: -
- ADR Packing Group: III
- ADR Flashpoint: -

14.6 Sea (IMDG)

- IMDG UN No.: UN2735
- Proper Shipping Name: Amines, liquid, corrosive, N.O.S.(2-aminoethanol, 2-diethylaminoethanol mixture)
- IMDG Hazard Class: 8
- IMDG subrisk: -
- IMDG Pack Group.: III
- IMDG EmS: F-A, S-B
- IMDG Flashpoint: -

14.7 Air (ICAO/IATA)

- ICAO Un No.: UN2735
- Proper Shipping Name: Amines, liquid, corrosive, N.O.S.(2-aminoethanol, 2-diethylaminoethanol mixture)
- ICAO Packing Group: III
- ICAO Hazard Class: 8
- ICAO subrisk: -
- ICAO Flashpoint: -

SECTION 14 Transport information (....)

14.8 DOT / CFR (US Department of Transportation)

- Identification Number: UN2735
- DOT Proper Shipping Name: Amines, liquid, corrosive, N.O.S.(2-aminoethanol, 2-diethylaminoethanol mixture)
- DOT Labels:
- Product RQ (lbs): -
- Hazardous Material: 2-aminoethanol,
 - 2-diethylaminoethanol
- 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.
 - This Safety Data Sheet is provided in compliance with The Dangerous Substances Directive (67/548/EEC)
 - Counsil 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: 17079
 - This product is approved by the Norwegian Health Authorities and listed in Approved/evaluated chemicals for use in potable water supply onshore and offshore.
- 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. H302: Harmful if swallowed. H312: Harmful in contact with skin. H314: Causes severe skin burns and eye damage. H332: Harmful if inhaled. H335: May cause respiratory irritation. R10: Flammable. R20/21/22: Harmful by inhalation, in contact with skin and if swallowed. R34: Causes 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

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

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