

SAFETY DATA SHEET

This Safety Data Sheet is provided in compliance with the EC Directive 1907/2006-453/2010

SECTION 1 Identification of the substance/mixture and of the company/undertaking

- 1.1 Product identifier
 - Product Name: ANTIFOULANT 9-321
 - Product Part Number: 777700 (25Ltr plastic)
- 1.2 Relevant identified uses of the substance or mixture and uses advised against
 - Use of the substance/mixture: Water treatment
- 1.3 Details of the supplier of the safety data sheet
 - Name of Supplier: Wilhelmsen Ships Service AS
 - Address of Supplier: Willem Barentszstraat 50, 3165AB Rotterdam, The Netherlands
 - Telephone: Telephone: +31 4877 777 Fax: +31 4877 888
 - Head office: Wilhelmsen Ships Service AS
 - Strandveien 20, N1324 Lysaker
 - Norway, Tel: (47) 6349 440 35

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- 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
 - ****ONLY TO BE USED IN CASE OF AN INCIDENT****
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 - International 24hrs Emergency NCEC:+ 44 1865 407333
 - American 24hrs Emergency CHEMTREC (800) 424 9300
 - American Chemistry Council 24hrs +1 703 527 3887
 - Greece: Poisoning emergency center, +30 210 7793777
 - Norway: Poison information centre, +47 22591300
 - Sweden: Poison information centre, +46 08 33 12 31
 - China NRCC 24hrs emergency telephone number: +86-0532-8388 9090
 - Wilhelmsen Ships Service, Melbourne, AUSTRALIA Emergency 24hrs: +61 3 9630 0998
 - The Netherlands: National Poisons Information Centre + 31 30 274 88 88

SECTION 2 Hazards identification

2.1 Classification of the substance or mixture

SECTION 2 Hazards identification (....)

- Counsil Directive 1999/45/EEC Classification, packing and labelling of dangerous preparations.
- Refer to current The Dangerous Substances Directive (67/548/EEC)
- Symbols: C, T
- R48/25, R35, R22

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- Regulations 1272/2008/EEC. Classification, labeling and packing of dangerous substances and preparations
- Symbols: GHS05, GHS09, GHS08, GHS06
- Signal Word: Danger
- Acute Tox. 3
- Skin Corr. 1B
- Aquatic Chronic 2
- H301, H314, H372, H411

2.2 Label elements









- Signal Word: Danger
- Acute Tox. 3
- Skin Corr. 1B
- Aquatic Chronic 2

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- Contains:
- ethanediol
- N-Coco-1,3-diaminopropane

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- Hazard phrases
 - Toxic if swallowed.
 - Causes severe skin burns and eye damage.
 - Causes damage to organs through prolonged or repeated exposure.
 - Toxic to aquatic life with long lasting effects.
- Precautionary Phrases
 - Do not breathe dust/fume/gas/mist/vapours/spray.
 - Wear protective gloves/protective clothing/eve protection/face protection.
 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 - Dispose of contents/container to an authorised waste collection point

2.3 Other hazards

- Odour: Slight smell of ammonia
- Appearance: Liquid, light, yellow
- Inhalation: Vapours or aerosols may cause irritation of eyes, nose and respiratory tract

Datasheet Number 777700 - v9.0.0 Prometheus version 1.4.3.1

SECTION 3 Composition/information on ingredients

3.1 Mixtures

- ethanediol

Concentration: 60-100 % CAS Number: 107-21-1 EC Number: 203-473-3 Symbols: Xn, GHS07

R/H Phrases: R22 - H302, H373

Categories: Acute Tox. 4

N-Coco-1,3-diaminopropane
 Concentration: 10-30 %
 CAS Number: 61791-63-7
 EC Number: 263-195-3

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

R/H Phrases: R22-R35-R48/25-R50 - H301, H314, H372, 410

Categories: Acute Tox. 3, Skin Corr. 1B, Aquatic Chronic 1, STOT RE 1

SECTION 4 First aid measures

- 4.1 Description of first aid measures
 - IF ON SKIN: Wash with plenty of soap and water.
 - IF ON CLOTHING: rinse immediately contaminated clothing and skin with plenty of water before removing clothes.
 - 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.
- When in doubt or symptoms persist, seek medical attention

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- IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
- Give plenty of water to drink
- Never make an unconscious person vomit or drink fluids
- When in doubt or symptoms persist, seek 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.
- When in doubt or symptoms persist, seek medical attention
- 4.2 Most important symptoms and effects, both acute and delayed
 - Vapours or aerosols may cause irritation of eyes, nose and respiratory tract
 - Prolonged skin or eye contact may cause chemical burns
 - The ingestion of significant quantities may cause damage to stomach lining
 - Toxic if swallowed.
- 4.3 Indication of any immediate medical attention and special treatment needed
 - Treat symptomatically
 - No information available

SECTION 5 Fire-fighting measures

- 5.1 Extinguishing media
 - In case of fire: use water, carbon dioxide or dry agent for extinction
- 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
 - Wash thoroughly after dealing with spillage
- 6.2 Environmental Precautions
 - Do not allow to enter public sewers and watercourses
 - Do not flush spilt material into any public water system
- 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.
 - Do not get in eyes, on skin, or on clothing.
 - Eyewash bottles should be available
- 7.2 Conditions for safe storage, including any incompatibilities
 - Store in a well-ventilated place. Keep cool.
 - Keep container tightly closed.
- 7.3 Specific end use(s)

SECTION 8 Exposure controls/personal protection

- 8.1 Control parameters
 - ethanediol

WEL (short term) (SK) 104 mg/m3 WEL (long term) (REACH) 35 mg/m3 WEL (DK) 10 ppm

- 8.2 Exposure controls
 - No special precautions are required for this product
- 8.3 Occupational exposure controls

SECTION 8 Exposure controls/personal protection (....)







- Wear goggles giving complete eye protection
- Respiratory protection may be required under exceptional circumstances when excessive air contamination exists
- Wear suitable respiratory protection. Gas cartridge (organic substances).
- Wear suitable protective clothing, including eye/face protection and gloves (butyl 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.

SECTION 9 Physical and chemical properties

- 9.1 Information on basic physical and chemical properties
 - Odour: Slight smell of ammonia
 - Appearance: Liquid, light, yellow
 - pH: 11.5
 - Boiling point 155 °C to >300 °C at 760 mm /Hg
 - Melting point -17 °C
 - Completely soluble in water
 - Density 1,06 g/cm3 at 20 deg C
 - Flash point >115 (CC) deg C (CC)
 - Auto-ignition point >135 deg C
 - Flammability: Lower flammability limit 3%(in air), Upper flammability limit 15%(in air)
- 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
 - Keep away from naked flames, incandescent or hot surfaces
 - Avoid overheating
- 10.5 Hazardous Decomposition Products
 - No hazardous decomposition products known

SECTION 11 Toxicological information

11.1 Information on toxicological effects

SECTION 11 Toxicological information (....)

- LD50 (oral,rat) 96 hours (N-coco-1,3-diaminopropane) 50-300 mg/kg
- LD50 (skin,rat) (N-coco-1,3-diaminopropane) > 2000-5000 mg/kg
- LD50 (oral,rat) (1,2 -ethanediol) >5000 mg/kg
- LD50 (skin,rabbit) (1,2 -ethanediol) >10000 mg/kg

11.2 Contact with eyes

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

11.3 Contact with skin

- Prolonged skin or eye contact may cause chemical burns
- Can be absorbed through 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 kidneys
- Can cause damage to the stomach lining
- May cause dizziness, confusion, headache or stupor
- May cause irregular pulse
- May cause unconsciousness

11.5 Inhalation

- In cases of severe exposure, irritation may develop

SECTION 12 Ecological information

12.1 Toxicity

- LC50 (fish) (N-coco-1,3-diaminopropane) 0,1-1 mg/l (96 hr)
- IC50 (algae) (N-coco-1,3-diaminopropane) 0,1-1 mg/l (72 hr)
- Biodegradability. OECD-test. 28 days >60 % (N-coco-1,3-diaminopropane)
- Biodegradability. OECD-test. 28 days >60 % (1,2 -ethanediol)
- LC50 (fish) (1,2 -ethanediol) >10000 mg/l (96 hr)

12.2 Persistence and degradability

- 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

SECTION 13 Disposal considerations (....)

- EU Waste class: 07 06 04

SECTION 14 Transport information





14.1 UN

- UN No.: UN2922

- Proper Shipping Name: CORROSIVE LIQUID, TOXIC, N.O.S. (Ethanediol, N-Coco-1,3-diaminopropane mixture)

Hazard Class: 8+6.1Packing 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.: UN2922

- Proper Shipping Name: CORROSIVE LIQUID, TOXIC, N.O.S. (Ethanediol,

N-Coco-1,3-diaminopropane mixture)

ADR Hazard Class: 8ADR subrisk: 6.1ADR Packing Group: II

14.6 Sea (IMDG)

- IMDG UN No.: UN2922

- Proper Shipping Name: CORROSIVE LIQUID, TOXIC, N.O.S. (Ethanediol,

N-Coco-1,3-diaminopropane mixture)

IMDG Hazard Class: 8IMDG subrisk: 6.1IMDG Pack Group.: IIIMDG EmS: F-A, S-B

14.7 Air (ICAO/IATA)

- ICAO UN No.: UN2922

- Proper Shipping Name: CORROSIVE LIQUID, TOXIC, N.O.S. (Ethanediol, N-Coco-1,3-diaminopropane mixture)

ICAO Packing Group: IIICAO Hazard Class: 8ICAO subrisk: 6.1

14.8 DOT / CFR (US Department of Transportation)

- Identification Number: UN2922

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Revision: 14 Jun 2015

SECTION 14 Transport information (....)

- DOT Proper Shipping Name: CORROSIVE LIQUID, TOXIC, N.O.S. (Ethanediol,

N-Coco-1,3-diaminopropane mixture)

- DOT Labels: 8+6.1

Product RQ (lbs): Not applicableHazardous Material: Ethanediol,

N-Coco-1,3-diaminopropane

Hazard Class: 8DOT subrisk: 6.1

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)
- Regulations 1272/2008/EEC. Classification, labeling and packing of dangerous substances and preparations
- Norwegian Productregistration no: 51760

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:- H301: Toxic if swallowed. H302: Harmful if swallowed. H314: Causes severe skin burns and eye damage. H372: Causes damage to organs through prolonged or repeated exposure. H373: May cause damage to organs through prolonged or repeated exposure. R22: Harmful if swallowed.

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

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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Wilhelmsen Ships Service INC 2200 W. Pacific Coast Highway US-90810 Long Beach California, United

SECTION 16 Other information (....)

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