

SAFETY DATA SHEET

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

1.1 Product identifier

Product Name: ENGINE WATER TREATMENT 9-108
 Datasheet Number: 777703 6. 0. 0
 Product Part Number: 777703 (25Ltr)
 Head Office:: Wilhelmsen Ships Service AS
 Address: Strandveien 20, N1324 Lysaker, Norway, Tel: (+47) 67 58 45 50

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

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
 +31 4877 888
 The Netherlands
 Telephone: +31 4877 777
 Fax:
 Responsible Person: Patrick.Rijsdijk, Product HSE Manager, Tel.: +31 6 349 440 35
 Email: Patrick.Rijsdijk@wilhelmsen.com

1.4 Emergency telephone number

-ONLY TO BE USED IN CASE OF AN INCIDENT-
 NCEC: +44 1865 407333, CHEMTREC (800) 424 9300
 American Chemistry Council +1 703 527 3887,
 Greece +30 210 7793777
 Australia: +61 3 9630 0998
 Giftinformasjonssentralen in Norway Tel.: +47 22591300

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)
- Regulations 1272/2008/EEC. Classification, labeling and packing of dangerous substances and preparations

2.2 Label elements



Toxic



Dangerous for the Environment

- Contains:
- sodium nitrite
- sodium hydroxide

2 Hazards identification (....)

- Sodiumtetraborate
- Sodium tolytriazole

Risk Phrases

- Toxic if swallowed (R25)
- Causes burns (R34)
- Very toxic to aquatic organisms (R50)

Safety Phrases

- Avoid contact with skin and eyes (S24/25)
- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice (S26)
- This material and its container must be disposed of in a safe way (S35)
- Wear suitable protective clothing, eye/face protection and gloves (S36/37/39)
- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible) (S45)

2.3 Other hazards

- Odour: Odourless
- Appearance: Liquid, light, yellow
- Inhalation: Inhalation may cause severe irritation and, dependent on dose, chemical burns.

3 Composition/information on ingredients

3.1 Mixtures

Chemical Name	Concentration	CAS Number	EC Number	R/H Phrases*	Symbols
sodium nitrite	30-60%	7632-00-0	231-555-9	R8, 25, 50	O,T, N
GHS CLASSIFICATION: Acute Tox. 3, Eye Irrit. 2 Aquatic Acute 1, Ox. Sol.2				H301, H400 H319, H272	GHS09, GHS06 GHS03
sodium hydroxide	1-5%	1310-73-2	215-185-5	R35	C
GHS CLASSIFICATION: Eye Dam. 1, Skin Corr.1B Met.Corr. 1				H318, H314 H290	GHS05
Sodiumtetraborate	1-2%	1330-43-4	215-540-4	R60, 61	T
GHS CLASSIFICATION: Repr. 1B, Eye Irrit. 2				H360, H319	GHS07
Sodium tolytriazole	1-5%	64665-57-2	265-004-9	R22, 34	C
GHS CLASSIFICATION: Skin Corr. 1B, Acute Tox. 4				H314, H302	GHS05, GHS07

*See Section 16

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.
- When in doubt or symptoms persist, seek medical attention

4 First aid measures (....)

-
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- Irrigate eyes thoroughly whilst lifting eyelids
- Obtain immediate medical attention
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- IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
- Seek immediate medical attention
-
- IF INHALED: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing.
- Seek medical attention if irritation persists

4.2 Most important symptoms and effects, both acute and delayed

- Prolonged skin or eye contact may cause chemical burns
- The ingestion of significant quantities may cause damage to lungs

4.3 Indication of immediate medical attention and special treatment needed

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

5.3 Advice for firefighters

- Wear chemical protection suit and positive-pressure breathing apparatus
-

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

- None
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7 Handling and storage

7.1 Precautions for safe handling

- Avoid breathing dust/fume/gas/mist/vapours/spray.
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7 Handling and storage (....)

- Do not get in eyes, on skin, or on clothing.
- Eyewash bottles should be available

7.2 Conditions for safe storage, including any incompatibilities

- Keep container tightly closed, in a cool, well ventilated place (S3/7/9)
- Avoid contact with acid

7.3 Specific end use(s)

8 Exposure controls/personal protection

8.1 Control parameters

- sodium hydroxide
WEL (short term) 2 mg/m³
- Sodiumtetraborate
TLV (TWA) 1 mg/m³ ()

8.2 Exposure controls

- Engineering controls should be provided which maintain airborne concentrations as low as practicable

Occupational exposure controls

- In case of high airborne concentrations, wear suitable positive pressure respiratory protection equipment
- Wear rubber or PVC gloves
- Wear plastic or rubber gloves, boots and apron
- Wear goggles giving complete eye protection



Gloves



Suit



Respirator

Boots

9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

- Odour: Amine odour
- Appearance: Liquid, light, yellow
- pH 13.2 - 14 at 100 % concentration
- Boiling point 100 °C at 760 mm /Hg
- Completely soluble in water
- Density 1.31 g/cm³ at 20 deg C
- Auto-ignition point - not known

9.2 Other information

- None
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10 Stability and reactivity

10.1 Reactivity

- This article is considered stable under normal conditions
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10 Stability and reactivity (....)

10.2 Chemical stability

- Considered stable under normal conditions

10.3 Possibility of hazardous reactions

- No hazardous reactions known if used for its intended purpose

10.4 Conditions to avoid

- Keep away from heat and sources of ignition

10.5 Incompatible materials

- Contact with reducing agents liberates toxic gas
- Contact with reducing agents may form explosive gases
- Contact with amines liberates toxic gas

10.6 Hazardous Decomposition Products

- Decomposition products may include nitrogen oxides
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11 Toxicological information

11.1 Information on toxicological effects

- LD50 (oral,rat) (Sodium nitrite) 85 mg/kg

Inhalation

- Can cause damage to the lungs

Contact with skin

- Prolonged skin or eye contact may cause chemical burns

Contact with eyes

- Prolonged skin or eye contact may cause chemical burns
- Can cause damage to the eyes

Ingestion

- Not regarded as a potential route of exposure.
 - The ingestion of significant quantities may cause damage to mucous membranes
 - Toxic if swallowed.
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12 Ecological information

12.1 Toxicity

- LC50 (fish) (Sodium nitrite) 0.56 - 1.78 mg/l (96 hr)
- LC50 (fish) (Sodium tetraborate) 650 mg/l (96 hr)
- LC50 (rainbow trout) (Sodium tolytriazole) 23.7 mg/l (96 hr)
- EC50 (daphnia) (Sodium nitrite) 12.5-100 mg/l (48 hr)
- EC50 (daphnia) (Sodium tetraborate) 100 mg/l (48 hr)

12.2 Persistence and degradability

- No information available

12.3 Bioaccumulation Potential

- Bioaccumulation of the components in this product is insignificant.
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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

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

Classification

- EU Waste class: 16-03-03
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14 Transport information



Corrosive



Toxic

14.1 UN Number

- UN2922

14.2 UN Proper Shipping Name

- CORROSIVE LIQUID, TOXIC, N.O.S. (Sodium Hydroxide, Sodium Nitrite mixture)

14.3 Transport hazard class(es)

- 8+6.1

14.4 Packing group

- III

14.5 Environmental hazards

- This product contains components which are classified in the EU as dangerous for the environment.

14.6 Special precautions for user

- No special precautions are required for this product

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code

- Not applicable

Other information

14 Transport information (....)

Road/Rail (ADR/RID)

Proper Shipping Name:	CORROSIVE LIQUID, TOXIC, N.O.S. (Sodium Hydroxide, Sodium Nitrite mixture)		
ADR UN No.:	UN2922	ADR Hazard Class:	8
ADR Packing Group:	III	ADR subrisk:	6.1
ADR Flashpoint:	n/a		

Sea (IMDG)

Proper Shipping Name:	CORROSIVE LIQUID, TOXIC, N.O.S. (Sodium Hydroxide, Sodium Nitrite mixture)		
IMDG UN No.:	UN2922	IMDG Hazard Class.:	8
IMDG Pack Group.:	III	IMDG EmS:	F-A, S-B
IMDG subrisk:	6.1	IMDG Flashpoint:	n/a

Air (ICAO/IATA)

Proper Shipping Name:	CORROSIVE LIQUID, TOXIC, N.O.S. (Sodium Hydroxide, Sodium Nitrite mixture)		
ICAO Un No.:	UN2922	ICAO Hazard Class.:	8
ICAO Packing Group.:	III	ICAO subrisk:	6.1
ICAO Flashpoint:	n/a		

DOT / CFR (US Department of Transportation)

DOT Proper Shipping Name:	CORROSIVE LIQUID, TOXIC, N.O.S. (Sodium Hydroxide, Sodium Nitrite mixture)		
Hazardous Material:	Sodium Hydroxide, Sodium Nitrite		
Hazard Class:	8	Identification Number:	UN2922
Product RQ (lbs):	n/a	DOT subrisk:	6.1
DOT Flashpoint:	n/a		

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.
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- SUBSTANCES OF VERY HIGH CONCERN (SVHC) ACCORDING TO REACH, ARTICLE 57:
CAS: 1330-43-4 - Sodiumtetraborate

15.2 Chemical Safety Assessment

None

16 Other information

16 Other information (....)

Text of R and S phrase codes used in this safety data sheet:- H272: May intensify fire; oxidizer.; H290: May be corrosive to metals.; H301: Toxic if swallowed.; H302: Harmful if swallowed.; H314: Causes severe skin burns and eye damage.; H318: Causes serious eye damage.; H319: Causes serious eye irritation.; H360: May damage fertility or the unborn child.; H400: Very toxic to aquatic life.; R22: Harmful if swallowed; R25: Toxic if swallowed; R34: Causes burns; R35: Causes severe burns; R50: Very toxic to aquatic organisms; R60: May impair fertility; R61: May cause harm to the unborn child; R8: Contact with combustible material may cause fire.

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

OTHER CONTACT INFORMATION MAJOR CHEMICAL OFFICES

For addresses of other Wilhelmsen Ships Service offices, please refer to www.wilhelmsen.com/shipsservice

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