



## SAFETY DATA SHEET

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

#### 1.1 Product identifier

- Product Name: BALLAST TANK INHIBITOR 9-933
- Product Part Number: 777013 (Plastic 25L)

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

- Use of the substance/mixture:
- Ballast 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

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

### 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, N
- Causes burns (R34)
- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment (R51/53)

**SECTION 2 Hazards identification (....)**

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- Regulations 1272/2008/EEC. Classification, labeling and packing of dangerous substances and preparations
- Signal Word: Danger
- Symbols: GHS05, GHS09, GHS07
- Acute Tox. 4
- Skin Corr. 1B
- STOT SE 3
- Aquatic Chronic 2
- Harmful if swallowed (H302).
- Causes severe skin burns and eye damage (H314).
- May cause respiratory irritation (H335).
- Toxic to aquatic life with long lasting effects (H411).

**2.2 Label elements**

- Signal Word: Danger
- Acute Tox. 4
- Skin Corr. 1B
- STOT SE 3
- Aquatic Chronic 2
- 
- Contains:
- phosphoric acid ... %, orthophosphoric acid ... %
- zinc chloride
- 2-Phosphonobutane-1,2,4-tricarboxylic Acid
- 
- Hazard phrases
  - Harmful if swallowed (H302).
  - Causes severe skin burns and eye damage (H314).
  - May cause respiratory irritation (H335).
  - Toxic to aquatic life with long lasting effects (H411).
- Precautionary Phrases
  - If medical advice is needed, have product container or label at hand (P101).
  - Wear protective gloves/protective clothing/eye protection/face protection (P280).
  - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician (P301+P310).
  - Rinse mouth (P330).
  - Do NOT induce vomiting (P331).
  - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower (P303+P361+P353).
  - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing (P305+P351+P338).
  - Immediately call a POISON CENTER or doctor/physician (P310).
  - 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: Characteristic odour
- Appearance: colourless to yellow, miscible with water

## SECTION 3 Composition/information on ingredients

### 3.1 Mixtures

- phosphoric acid ... %, orthophosphoric acid ... %  
Concentration: 10-30%  
CAS Number: 7664-38-2  
EC Number: 231-633-2  
Symbols: C - GHS05  
R/H Phrases: R34 - H314, H290  
Categories: Skin Corr. 1B, Met. Corr. 1
  - zinc chloride  
Concentration: 10-30%  
CAS Number: 7645-85-7  
EC Number: 231-592-0  
Symbols: C, N - GHS05, GHS09, GHS07  
R/H Phrases: R22, R34, R50/53 - H302, H314, H335, H410  
Categories: Acute Tox. 4, Skin Corr. 1B, STOT SE 3, Aquatic Chronic 1
  - 2-Phosphonobutane-1,2,4-tricarboxylic Acid  
Concentration: 10-30%  
CAS Number: 37971-36-1  
EC Number: 253-733-5  
Symbols: Xi, GHS07  
R/H Phrases: R36 - H319  
Categories: Eye Irrit. 2
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## SECTION 4 First aid measures

### 4.1 Description of first aid measures

- IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing (P304+P341).
- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing (P304+P340).
- When in doubt or symptoms persist, seek medical attention
- 
- 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
- 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).
- Obtain immediate medical attention

### 4.2 Most important symptoms and effects, both acute and delayed

- Can cause damage to the eyes
- Possible blistering of the skin of affected areas
- The ingestion of significant quantities may cause damage to mucous membranes
- The ingestion of significant quantities may cause damage to stomach lining

### 4.3 Indication of any immediate medical attention and special treatment needed

**SECTION 4 First aid measures (....)**

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- Treat symptomatically
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**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

- Smoke from fires is toxic. Take precautions to protect personnel from exposure
- Smoke from fires is corrosive. Take precautions to protect personnel from exposure

## 5.3 Advice for firefighters

- Keep container(s) exposed to fire cool, by spraying with water
  - In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion (P371+P380+P375).
  - Wear chemical protection suit and positive-pressure breathing apparatus
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**SECTION 6 Accidental release measures**

## 6.1 Personal precautions, protective equipment and emergency procedures

- In case of insufficient ventilation, wear suitable positive pressure respiratory protection equipment
- Wear chemical protection suit
- Wear neoprene or nitrile gloves

## 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

- Eliminate all ignition sources if safe to do so (P381).
- Absorb spillage in earth or sand
- Place in sealable container
- Seal containers and label them
- Remove contaminated material to safe location for subsequent disposal
- Ventilate the area and wash spill site after material pick-up is complete

## 6.4 Reference to other sections

- See Section 13
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**SECTION 7 Handling and storage**

## 7.1 Precautions for safe handling

- Avoid breathing dust/fume/gas/mist/vapours/spray (P261).
- Avoid contact with alkalis (strong bases)
- Avoid contact with metals
- Eyewash bottles should be available
- See Section 8

## 7.2 Conditions for safe storage, including any incompatibilities

- Keep container tightly closed (P233).
- Keep cool. Protect from sunlight (P235+P410).
- Avoid contact with alkalis (strong bases)

## 7.3 Specific end use(s)

- Restricted to professional users

## SECTION 8 Exposure controls/personal protection

### 8.1 Control parameters

- phosphoric acid ... %,  
orthophosphoric acid ... %  
WEL (long term) 1 mg/m<sup>3</sup>  
WEL (short term) 2 mg/m<sup>3</sup>
- zinc chloride  
WEL (long term) 1 mg/m<sup>3</sup>  
WEL (short term) 2 mg/m<sup>3</sup>

### 8.2 Exposure controls

- Ensure adequate ventilation

### 8.3 Occupational exposure controls



- In case of inadequate ventilation wear respiratory protection (P285).
- Wear suitable respiratory protection. Gas cartridge (acid gases).
- Wear suitable protective clothing, including eye/face protection and gloves (neoprene or nitrile 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.

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## SECTION 9 Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

- Odour: Characteristic odour
- Appearance: colourless to yellow, miscible with water
- pH 1-2
- Boiling point 100 °C
- Density 1,32 - 1,38 g/cm<sup>3</sup> 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 information available

### 10.3 Incompatible materials

- Incompatible with alkalis (strong bases)
- Avoid contact with metals

### 10.4 Conditions to avoid

- Keep away from frost

### 10.5 Hazardous Decomposition Products

- Oxides of phosphorous and phosphorous acid mist

## SECTION 11 Toxicological information

### 11.1 Information on toxicological effects

- LD50 (oral,rat) (Phosphoric acid) 2600 mg/kg
- LD50 (oral,rat) (Zink Chloride) 1100-1260 mg/kg
- LD50 (oral,rat) (2-Phosphonobutane-1,2,4-tricarboxylic Acid) >6500 mg/kg

### 11.2 Contact with eyes

- Can cause damage to the eyes

### 11.3 Contact with skin

- May cause blistering of the skin

### 11.4 Ingestion

- Not regarded as a potential route of exposure.
- Can cause damage to the stomach lining
- In cases of severe exposure, gastro-intestinal disturbances may develop

### 11.5 Inhalation

- In cases of severe exposure, breathing difficulty may develop
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## SECTION 12 Ecological information

### 12.1 Toxicity

- LC50 (fish) (2-Phosphonobutane-1,2,4-tricarboxylic Acid) 5300 mg/l (96 hr)
- LC50 (fish) (Phosphoric acid) 3-3,25 mg/l (96 hr)
- LC50 (fish) (Zink Chloride) 1,169 mg/l (96 hr)
- This product contain an acidic component which may cause a low pH-value. Effect depends on waterquality and the organisms tolerance due to pH-value
- This product contains components 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

- Not applicable

### 12.4 Mobility in soil

- miscible with 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

- Disposal should be in accordance with local, state or national legislation
- Dispose of contents/container to an authorised waste collection point (P501)

### 13.2 Classification

- EU Waste class: 06 01 04
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## SECTION 14 Transport information



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14.1 UN

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**SECTION 14 Transport information (....)**

- UN No.: UN3264
- Proper Shipping Name: Corrosive liquid, acidic, inorganic, n.o.s. (Zink Chloride, phosphoric acid mixture)
- Hazard Class: 8
- Packing Group: III

**14.2 Environmental hazards**

- This product contains components which are classified in the EU as dangerous for the environment.
- 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.: UN3264
- Proper Shipping Name: Corrosive liquid, acidic, inorganic, n.o.s. (Zink Chloride, phosphoric acid mixture)
- ADR Hazard Class: 8
- ADR subrisk: n/a
- ADR Packing Group: III
- ADR Flashpoint: n/a

**14.6 Sea (IMDG)**

- IMDG UN No.: UN3264
- Proper Shipping Name: Corrosive liquid, acidic, inorganic, n.o.s. (Zink Chloride, phosphoric acid mixture)
- IMDG Hazard Class: 8
- IMDG subrisk: n/a
- IMDG Pack Group.: III
- IMDG EmS: F-A, S-B
- IMDG Flashpoint: n/a

**14.7 Air (ICAO/IATA)**

- ICAO UN No.: UN3264
- Proper Shipping Name: Corrosive liquid, acidic, inorganic, n.o.s. (Zink Chloride, phosphoric acid mixture)
- ICAO Packing Group: III
- ICAO Hazard Class: 8
- ICAO subrisk: n/a
- ICAO Flashpoint: n/a

**14.8 DOT / CFR (US Department of Transportation)**

- Identification Number: UN3264
- DOT Proper Shipping Name: Corrosive liquid, acidic, inorganic, n.o.s. (Zink Chloride, phosphoric acid mixture)
- DOT Labels:
- Product RQ (lbs): n/a
- Hazardous Material: Zink Chloride, phosphoric acid
- Hazard Class: 8
- DOT subrisk: n/a

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**SECTION 14 Transport information (....)**

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- DOT Flashpoint: n/a
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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.
- Council Directive 1999/45/EEC Classification, packing and labelling of dangerous preparations.
- Refer to The Dangerous Substances Directive (67/548/EEC)
- Regulations 1272/2008/EEC. Classification, labeling and packing of dangerous substances and preparations
- Norwegian Productregistration no: 308501

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:- H290: May be corrosive to metals. H302: Harmful if swallowed. H314: Causes severe skin burns and eye damage. H319: Causes serious eye irritation. H335: May cause respiratory irritation. H410: Very toxic to aquatic life with long lasting effects. R22: Harmful if swallowed. R34: Causes burns. R36: Irritating to eyes. 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

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](http://www.wilhelmsen.com/shipsservice)

**OTHER CONTACT INFORMATION MAJOR CHEMICAL OFFICES**

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