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**SAFETY DATA SHEET**

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

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**SECTION 1 Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier**

- Product Name: LR HARDNESS KIT DROP TEST 4-100 PPM
- Product Part Number: 778114
- other parts in this kit: Hardness LR Titrant - TH5 Total Hardness Indicator.
- And are not classified as hazardous and are not subjected to issue a Safety Data Sheet

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

- Use of the substance/mixture: Water testing

**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: +31 4877 777 Fax: +31 4877 888
- Head office: Wilhelmsen Ships Service AS
- Strandveien 20, N1324 Lysaker
- Norway, Tel: (47) 6349 440 35
- Other suppliers SEE SECTION 16!!!
- For quotations contact your local Customer Services
- Responsible Person: Product HSE Manager,
- Email: Email: WSS.GLOBAL.SDSINFO@wilhelmsen.com
- Telephone: Tel.: +31 10 4877775

**1.4 Emergency telephone number**

- \*\*\*\*ONLY TO BE USED IN CASE OF AN INCIDENT\*\*\*\*
- International 24hrs Emergency NCEC: + 44 1865 407333
- American Chemistry Council 24hrs +1 703 527 3887
- American 24hrs Emergency CHEMTREC (800) 424 9300
- 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

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**SECTION 2 Hazards identification****2.1 Classification of the substance or mixture**

- Council Directive 1999/45/EEC Classification, packing and labelling of dangerous preparations.
- Dangerous Substances Directive (67/548/EEC). Classification, packaging and labelling of dangerous substances

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

- Symbols: Xi
- Irritating to eyes and skin (R36/38)
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- Regulations 1272/2008/EEC. Classification, labeling and packing of dangerous substances and preparations
- Symbols: GHS07
- Skin Irrit. 2
- Eye Irrit. 2
- Causes skin irritation (H315).
- Causes serious eye irritation (H319).

**2.2 Label elements**

- Signal Word: Warning
- Skin Irrit. 2
- Eye Irrit. 2
- 
- Contains:
- 2-aminoethanol
- 
- Hazard phrases
  - Causes damage to bones through repeated or prolonged exposure (H372)
  - Causes serious eye irritation (H319).
  - Causes skin irritation (H315).
- Precautionary Phrases
  - Do not get in eyes, on skin, or on clothing (P262).
  - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician (P301+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
- Appearance: solution
- Odour: Characteristic odour

**SECTION 3 Composition/information on ingredients****3.1 Mixtures**

- 2-aminoethanol; ethanolamine
  - Concentration: 28-30%
  - CAS Number: 141-43-5
  - EC Number: 205-483-3
  - R/H Phrases: H332,H312,H302,H314, R20/21/22,R34
  - Symbols: GHS05,GHS07, C
  - Categories: Acute Tox. 4 Acute Tox. 4 Acute Tox. 4 Skin Corr. 1B
- Hydrochloric acid
  - Concentration: 1-2%

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

CAS Number: 7647-01-0

EC Number: 231-595-7

R/H Phrases: H335,H314, R34,R37

Symbols: GHS05, GHS07 - C, Xi

Categories: Skin Corr. 1B, STOT SE 3

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## **SECTION 4 First aid measures**

### 4.1 Description of first aid measures

- Contact with eyes: If substance has got into eyes, immediately wash out with plenty of water for at least 15 minutes, When in doubt or symptoms persist, seek medical attention
- Contact with skin: IF ON SKIN: Wash with plenty of soap and water (P302+P352).
- Ingestion: Do NOT induce vomiting (P331)., Give plenty of water to drink, Rinse mouth with water (only if the person is conscious), Obtain immediate medical attention
- Inhalation: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing (P341)., Remove patient to fresh air

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

- No information available

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

- No information available
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## **SECTION 5 Fire-fighting measures**

### 5.1 Extinguishing media

- In case of fire: use alcohol resistant foam for extinction (P370+P378)
- In case of fire: use dry powder/BCF for extinction (P370+P378)
- In case of fire: use water fog for extinction (P370+P378)

### 5.2 Special hazards arising from the substance or mixture

- No information available

### 5.3 Advice for firefighters

- No information available
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## **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
- Wash thoroughly after dealing with spillage

### 6.4 Reference to other sections

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

### 7.1 Precautions for safe handling

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## SECTION 7 Handling and storage (....)

- No special requirements
- 7.2 Conditions for safe storage, including any incompatibilities
- No special requirements
- 7.3 Specific end use(s)
- Contact supplier for further information
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## SECTION 8 Exposure controls/personal protection

- 8.1 Control parameters
- WEL (long term) (2-aminoethanol) 2.5mg/m<sup>3</sup> - 1 ppm
  - WEL (short term) (2-aminoethanol) 7.6mg/m<sup>3</sup> - 3 ppm
  - WEL (long term) (hydrochloric acid) 2mg/m<sup>3</sup> - 1 ppm
  - WEL (short term) (hydrochloric acid) 8mg/m<sup>3</sup> - 5 ppm
- 8.2 Exposure controls
- No special precautions are required for this product
- 8.3 Occupational exposure controls
- No respiratory protection is required
  - Wear plastic or rubber gloves
  - Wear goggles giving complete eye protection
  - Wash hands and working surfaces thoroughly after handling (P264).



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## SECTION 9 Physical and chemical properties

- 9.1 Information on basic physical and chemical properties
- Appearance: solution
  - Odour: Characteristic odour
  - Flash point 93 deg C (CC)
  - Solubility in water: miscible with water
  - pH: pH - not applicable
- 9.2 Other information
- No information available
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## SECTION 10 Stability and reactivity

- 10.1 Reactivity
- No hazardous reactions known if used for its intended purpose
- 10.2 Chemical stability
- This article is 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
- No special precautions are required for this product
- 10.5 Incompatible materials
- Not applicable
- 10.6 Hazardous Decomposition Products

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## **SECTION 10 Stability and reactivity (....)**

- No hazardous decomposition products known
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## **SECTION 11 Toxicological information**

### 11.1 Information on toxicological effects

- LD50 (oral, rat) (2-aminoethanol) 2050 mg/kg
- LD50 (dermal) : (2-aminoethanol) 1000 mg/kg

### 11.2 Contact with eyes

- Causes irritation

### 11.3 Contact with skin

- Causes irritation
- Prolonged exposure may cause abrasive irritation of the mucous membranes

### 11.4 Ingestion

- No information available

### 11.5 Inhalation

- No information available
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## **SECTION 12 Ecological information**

### 12.1 Toxicity

- No information available

### 12.2 Persistence and degradability

- No information available

### 12.3 Bioaccumulation Potential

- No information available

### 12.4 Mobility in soil

- No information available

### 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

- Not applicable
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## **SECTION 14 Transport information**



### 14.1 UN

- UN No.: UN3267

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

- Proper Shipping Name: CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S.  
(ETHANOLAMINE)

- Hazard Class: 8
- Packing Group: III

### **14.2 Environmental hazards**

- Not applicable

### **14.3 Special precautions for user**

- When supplied as part of a kit: The kit may be transported under classification UN3316  
CHEMICAL KIT

### **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.: UN3267
- Proper Shipping Name: CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S.  
(ETHANOLAMINE)
- ADR Hazard Class: 8
- ADR Packing Group: III

### **14.6 Sea (IMDG)**

- IMDG UN No.: UN3267
- Proper Shipping Name: CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S.  
(ETHANOLAMINE)
- IMDG Hazard Class: 8
- IMDG Pack Group.: III
- IMDG EmS: F-A,S-B
- Seg. Group: Acids, alkalis

### **14.7 Air (ICAO/IATA)**

- ICAO UN No.: UN3267
- Proper Shipping Name: CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S.  
(ETHANOLAMINE)
- ICAO Hazard Class: 8
- ICAO Packing Group: III

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

- Identification Number: UN3267
  - DOT Proper Shipping Name: CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S.  
(ETHANOLAMINE)
  - DOT Labels: 8
  - Product RQ (lbs): Not applicable
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## **SECTION 15 Regulatory information**

### **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

- Council Directive 1999/45/EEC Classification, packing and labelling of dangerous preparations.
- Regulations 1272/2008/EEC. Classification, labeling and packing of dangerous substances and preparations
- Refer to current The Dangerous Substances Directive (67/548/EEC)

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**SECTION 15 Regulatory information (....)**

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

**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:- 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. R20/21/22: Harmful by inhalation, in contact with skin and if swallowed. R34: Causes burns. R37: Irritating to respiratory system.

The information provided about the product on this Safety Data Sheet has been compiled from knowledge of the individual constituents

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 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 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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