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**SAFETY DATA SHEET**

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

- Product Name: REEFER CLEANER
- Product Part Number: 623983 (20 liter), 661827 (25 liter) 765107 (1ITR)
- Datasheet Number: 623983-r

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

- Use of the substance/preparation:
- Cleaning agent

**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,
- Email: Email: WSS.GLOBAL.SDSINFO@wilhelmsen.com
- Telephone: Tel.: +31 10 4877775

**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,

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**

- Council Directive 1999/45/EEC Classification, packing and labelling of dangerous preparations.
- This Safety Data Sheet is provided in compliance with The Dangerous Substances Directive (67/548/EEC)
- Irritating to eyes (R36)
- 
- Regulations 1272/2008/EEC. Classification, labeling and packing of dangerous substances and preparations
- Signal Word: Danger

## SECTION 2 Hazards identification (....)

- Symbols: GHS05
- Eye Dam. 1
- Causes serious eye damage (H318).

### 2.2 Label elements



- Signal Word: Danger
- Eye Dam. 1
- 
- Contains:
- didecyldimethylammonium chloride
- Fatty alcohol ethoxylates
- 2-(2-Butoksyethoxy)ethanol
- 
- Hazard phrases
- Causes serious eye damage (H318).
- Precautionary Phrases
- Wear protective gloves/protective clothing/eye protection/face protection (P280).
- 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).

### 2.3 Other hazards

- Not applicable
- Not a PBT according to REACH Annex XIII
- Appearance: Liquid, clear, light, yellow
- Odour: Odourless

## SECTION 3 Composition/information on ingredients

### 3.1 Mixtures

- Fatty alcohol ethoxylate  
Concentration: 1-5%  
CAS Number: 160875-66-1  
EC Number: Not applicable  
R/H Phrases: R22, R41 - H302, H318  
Symbols: Xn, GHS07, GHS05  
Categories: Acute Tox. 4, Eye Dam. 1
- didecyldimethylammonium chloride  
Concentration: 0-1%  
CAS Number: 7173-51-5  
EC Number: 230-525-2  
R/H Phrases: R34, R22, R50 - H302, H314  
Symbols: C, N - GHS07, GHS05  
Categories: Acute Tox. 4, Skin Corr. 1B
- 2-(2-butoxyethoxy)ethanol  
Concentration: 1-5%  
CAS Number: 112-34-5  
EC Number: 203-961-6  
R/H Phrases: R36 - H319  
Symbols: Xi, GHS07  
Categories: Eye Irrit. 2

**SECTION 3 Composition/information on ingredients (....)****3.2 Composition**

Composition comments Didecyldimethylammoniumchloride is efficient against the following bacteria and

virus:

Staphylococcus aureus  
Escherichia coli  
Pseudomonas aeruginosa  
Proteus mirabilis  
Candida albicans  
Penicillium notatues

Aspergillus niger  
Penicillium glaucum  
Trichophyton mentagrophytes  
Microsporum canis  
Cladosporium cladosporoides  
Penicillium verrucosum  
Aspergillus versicolor  
Hepatitt B  
HIV

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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).
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- IF SWALLOWED: rinse mouth. Do NOT induce vomiting (P301+P330+P331).
- Never make an unconscious person vomit or drink fluids
- Give plenty of water to drink
- Get medical advice/attention if you feel unwell (P314).
- 
- IF ON SKIN: Wash with plenty of soap and water (P302+P352).
- 
- 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).

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

- Mildly irritating to eyes
- Possible redness and irritation of affected areas

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

- No information available
- 

**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**

- Not applicable

**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

- 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
- Ventilate the area and wash spill site after material pick-up is complete

### 6.4 Reference to other sections

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## SECTION 7 Handling and storage

### 7.1 Precautions for safe handling

- Wear protective clothing as per section 8
- Do not get in eyes, on skin, or on clothing (P262).
- Eyewash bottles should be available

### 7.2 Conditions for safe storage, including any incompatibilities

- Store in a dry place. Store in a closed container (P402+P404).
- Store in a well-ventilated place (P403).
- Protect from frost

### 7.3 Specific end use(s)

- Contact supplier for further information
- 

## SECTION 8 Exposure controls/personal protection

### 8.1 Control parameters

- Fatty alcohol ethoxylate  
No exposure limits have been set for this substance
- didecyldimethylammonium chloride  
No exposure limits have been set for this substance
- 2-2(butoxyethoxy)ethanol  
TLV (TWA) 68 mg/m<sup>3</sup> ( )

### 8.2 Exposure controls

- No special ventilation is required unless the product is used in a spray form

### 8.3 Occupational exposure controls



- Wear suitable protective clothing, including eye/face protection and gloves (plastic or rubber are recommended)
  - No respiratory protection is needed if ventilation/extraction is adequate, otherwise wear approved dust mask
- 

## SECTION 9 Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

- Odour: Characteristic odour
  - Appearance: Liquid, pale yellow, soluble in water
  - pH 10,5 - 11,5 at 5-10 % concentration
  - Boiling point >100 °C to 760 °C
  - Completely soluble in water
-

**SECTION 9 Physical and chemical properties (....)**

- Density 1,030 - 1.03 g/cm<sup>3</sup> at 20 deg C
- Non combustible

## 9.2 Other information

- None
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**SECTION 10 Stability and reactivity**

## 10.1 Reactivity

- This article is considered stable under normal conditions

## 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

- Avoid overheating

## 10.5 Incompatible materials

## 10.6 Hazardous Decomposition Products

- No hazardous decomposition products known
- 

**SECTION 11 Toxicological information**

## 11.1 Information on toxicological effects

- LD<sub>50</sub> (oral,rat) (Alcohol ethoxylate) >300 mg/kg
- LD<sub>50</sub> (oral,rat) (Quart. ammoniumchloride) 238 mg/kg

## 11.2 Contact with eyes

- Causes redness and irritation

## 11.3 Contact with skin

- In cases of severe exposure, redness and irritation may develop

## 11.4 Ingestion

- The ingestion of significant quantities may cause gastro-intestinal disturbances

## 11.5 Inhalation

- May cause irritation
- 

**SECTION 12 Ecological information**

## 12.1 Toxicity

- LC<sub>50</sub> (fish) Acute: (Fatty alcohol ethoxylate) 10-100 mg/l (96 hr)
- LC<sub>50</sub> (fish) (Quart. ammoniumchloride) 0,19 mg/l (96 hr)
- Biodegradability. OECD-test. 28 days >60 % (2-(2-Butoksyethoxy)ethanol)
- Biodegradability. OECD-test. 28 days >60 % (Quart. ammoniumchloride)
- Biodegradability. OECD-test. 28 days >60 % (Fatty alcohol ethoxylate)
- "In general, this cleaning agent poses little danger to the environment, its main ingredients will either dissolve rapidly and dissociate in water or are readily/inherently biodegradable."

## 12.2 Persistence and degradability

- Its main ingredients will either dissolve rapidly and dissociate in water or are readily/inherently biodegradable.

## 12.3 Bioaccumulation Potential

- Bioaccumulation of the components in this product is insignificant.
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**SECTION 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

- Not applicable
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**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: -
- 

**SECTION 14 Transport information**

Not classified as hazardous for transport

## 14.1 UN

- UN No.: Not applicable
- Proper Shipping Name: Not applicable
- Hazard Class: Not applicable
- Packing Group: Not applicable

## 14.2 Environmental hazards

- Not Classified

## 14.3 Special precautions for user

- Not classified as hazardous for transport

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

- Not Classified
- Not applicable

## 14.5 Road/Rail (ADR/RID)

- ADR UN No.: Not applicable
- Proper Shipping Name: Not applicable
- ADR Hazard Class: Not applicable
- ADR Packing Group: Not applicable
- ADR subrisk: Not applicable
- ADR Flashpoint: Not applicable

## 14.6 Sea (IMDG)

- IMDG UN No.: Not applicable
- Proper Shipping Name: Not applicable
- IMDG Hazard Class: Not applicable
- IMDG Pack Group.: Not applicable
- IMDG EmS: Not applicable
- IMDG subrisk: Not applicable
- IMDG Flashpoint: Not applicable

## 14.7 Air (ICAO/IATA)

- ICAO Un No.: Not applicable
  - Proper Shipping Name: Not applicable
  - ICAO Hazard Class: Not applicable
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**SECTION 14 Transport information (....)**

- ICAO Packing Group: Not applicable
- ICAO subrisk: Not applicable
- ICAO Flashpoint: Not applicable

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

- Identification Number: Not applicable
  - DOT Proper Shipping Name: Not applicable
  - DOT Labels: Not applicable
  - Product RQ (lbs): Not applicable
  - Hazardous Material: Not applicable
  - Hazard Class: Not applicable
  - DOT subrisk: Not applicable
  - DOT Flashpoint: Not applicable
- 

**SECTION 15 Regulatory information****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

- This Safety Data Sheet is provided in compliance with The Dangerous Substances Directive (67/548/EEC)
- 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.
- Regulations 1272/2008/EEC. Classification, labeling and packing of dangerous substances and preparations
- Surfactants in this product are readily biodegradable in compliance with new Detergent Regulation 1. July 2005.
- Norwegian Productregistration no:
- Does not contain phosphate. This product contains Disodiummetasilicate in a concentration lower than 1%, Disodiummetasilicate act as a buffer and "holds" pH even when amounts are low. Testing due to OECD 431 "In vitro skin corrosion" - verifies that this product is not corrosive. IMO approved - Tankcleaning
- 
- Nonionic surfactants 5-15 %
- Amphoteric surfactants <5 %
- Cationic surfactants <5%.

**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. H314: Causes severe skin burns and eye damage. H318: Causes serious eye damage. H319: Causes serious eye irritation. R22: Harmful if swallowed. R34: Causes burns. R36: Irritating to eyes. R41: Risk of serious damage to eyes. R50: Very toxic to aquatic organisms.

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

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**SECTION 16 Other information (....)**

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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