

SAFETY DATA SHEET

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

- 1.1 Product identifier
 - Product Name: DIESEL FUEL LUBRICITY IMPROVER
 - Product Part Number: 777195 (25L)
 - Datasheet Number: 777195
- 1.2 Relevant identified uses of the substance or mixture and uses advised against
 - Use of the substance/preparation:
 - Fuel 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,
- 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
 - Regulations 1272/2008/EEC. Classification, labeling and packing of dangerous substances and preparations
 - Symbols: GHS05, GHS09
 - Eve Dam. 1
 - Aquatic Chronic 2
 - Causes serious eye damage (H318).
 - Toxic to aquatic life with long lasting effects (H411).

SECTION 2 Hazards identification (....)

Counsil Directive 1999/45/EEC Classification, packing and labelling of dangerous preparations.

- Symbols: Xi, N
- Irritating to eyes (R36)
- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment (R51/53)

2.2 Label elements





- Signal Word: Danger
- Eye Dam. 1
- Aquatic Chronic 2
- Contains:
- Reaction mass 2,6-di-tert-bytylphenol and 2,4,6-tri-tert-butylphenol
- Fatty acid, tall oil

-

- Hazard phrases

Causes serious eye damage (H318).

Toxic to aquatic life with long lasting effects (H411).

- Precautionary Phrases

Wear protective gloves/protective clothing/eye protection/face protection (P280).

Avoid release to the environment (P273).

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).

IF SWALLOWED: rinse mouth. Do NOT induce vomiting (P301+P330+P331).

Call a POISON CENTER or doctor/physician if you feel unwell (P312).

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: Aromatic odour
- Appearance: Liquid, yellow

SECTION 3 Composition/information on ingredients

3.1 Mixtures

- Reaction Mass of, 2,6-di-tert-butylphenol

and 2,4,6-tri-tert-butylphenol. REACH# 01-2119538013-51

Concentration: 1-5%

CAS Number: Not applicable EC Number: 907-745-9

R/H Phrases: R41, R50/53, - H318, H410

Symbols: Xi, N, GHS05, GHS09

Categories: Eye Dam. 1, Aquatic Chronic 1 REACH REG. NO: 01-21195380 13-51

- Fatty acid. tall oil

Concentration: 60-100% CAS Number: 61790-12-3 EC Number: 263-107-3 R/H Phrases: Not applicable Symbols: Not applicable

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

Categories: Not applicable

SECTION 4 First aid measures

- 4.1 Description of first aid measures
 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing (P305+P351+P338).
 - Continue flushing with water until medical help arrives
 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower (P303+P361+P353).
 - Seek immediate medical attention

_

- IF SWALLOWED: rinse mouth. Do NOT induce vomiting (P301+P330+P331).
- Give plenty of water to drink
- Seek immediate medical attention

_

- IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing (P304+P341).
- Get medical advice/attention if you feel unwell (P314).
- 4.2 Most important symptoms and effects, both acute and delayed
 - Vapours or aerosols may cause irritation of eyes, nose and respiratory tract
 - Severe lachrymatory effects (makes eyes water)
- 4.3 Indication of any immediate medical attention and special treatment needed
 - No information available

SECTION 5 Fire-fighting measures

- 5.1 Extinguishing media
 - In case of fire use water, foam, carbon dioxide or dry agent (S43)
- 5.2 Special hazards arising from the substance or mixture
 - In confined spaces, sewers, etc., the vapours may collect to form explosive mixtures with air
 - Vapours are heavier than air and may travel considerable distances to a source of ignition and flashback
 - May form explosive mixtures with air
 - In case of fire: (P370)
 - Decomposition products may include carbon dioxide
 - Decomposition products may include carbon oxides
- 5.3 Advice for firefighters
 - Wear chemical protection suit and positive-pressure breathing apparatus
 - Keep container(s) exposed to fire cool, by spraying with water
 - Prevent run off water from entering drains if possible

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
 - Avoid release to the environment (P273).
- 6.3 Methods and material for containment and cleaning up
 - Stop leak if safe to do so (P376).
 - Absorb spillage in earth or sand

SECTION 6 Accidental release measures (....)

- Dyke to prevent entry to sewer or waterway. Transfer liquid to a holding container
- Place in appropriate 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

SECTION 7 Handling and storage

- 7.1 Precautions for safe handling
 - Read label before use (P103).
 - Wear protective clothing as per section 8
 - Do not get in eyes, on skin, or on clothing (P262).
 - Avoid release to the environment (P273).
 - Do not handle until all safety precautions have been read and understood (P202).
 - Proper chemicals handling procedures should be adopted
- 7.2 Conditions for safe storage, including any incompatibilities
 - Keep only in original container (P234).
 - Opened containers should be carefully resealed and stored in an upright position
 - Protect from sunlight. Store in a well-ventilated place (P410+P403).
- 7.3 Specific end use(s)
 - Contact supplier for further information

SECTION 8 Exposure controls/personal protection

- 8.1 Control parameters
 - No exposure limits have been set for this substance
- 8.2 Exposure controls
 - No special precautions are required for this product
- 8.3 Occupational exposure controls
 - In case of inadequate ventilation wear respiratory protection (P285).
 - Wear suitable respiratory protection. Gas cartridge (organic substances).
 - Wear suitable protective clothing, including eye/face protection and gloves (neoprene or nitrile 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: Aromatic odour
 - Appearance: Liquid, yellow
 - insoluble in water
 - Density 0.9 g/cm3 at 20 deg C
 - Boiling Point/Range: Boiling point >200 °C

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

- 9.2 Other information
 - None

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
 - Keep away from heat and sources of ignition
- 10.5 Incompatible materials
 - None
- 10.6 Hazardous Decomposition Products
 - No hazardous decomposition products known
 - Decomposition products may include carbon dioxide
 - Decomposition products may include carbon oxides

SECTION 11 Toxicological information

- 11.1 Information on toxicological effects
 - LD50 (oral,rat) (Reaction mass 2,6-di-tert-bytylphenol and 2,4,6-tri-tert-butylphenol) 2976 mg/kg
 - LD50 (oral,rat) (Fatty acid, tall oil) >2000 mg/kg
- 11.2 Contact with eyes
 - Causes irritation
 - Can cause damage to the eyes
- 11.3 Contact with skin
 - Prolonged skin contact will result in defatting of the skin, leading to irritation, and in some cases, dermatitis
- 11.4 Ingestion
 - May cause gastro-intestinal disturbances
- 11.5 Inhalation
 - In cases of severe exposure, irritation may develop

SECTION 12 Ecological information

- 12.1 Toxicity
 - LC50 (fish) (Fatty acid, tall oil) 0,3 mg/l (96 hr)
 - LC50 (fish) (Fatty acid, tall oil) 10000 mg/l (96 hr)
 - Biodegradability. OECD-test. 28 days >60 % (Fatty acid, tall oil)
- 12.2 Persistence and degradability
 - Not readily biodegradable
- 12.3 Bioaccumulation Potential
 - Bioaccumulation Potential

SECTION 12 Ecological information (....)

- 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
 - Not applicable

SECTION 13 Disposal considerations

- 13.1 Waste treatment methods
 - Dispose of contents/container to an authorised waste collection point (P501)
 - This material and/or its container must be disposed of as hazardous waste
- 13.2 Classification
 - EU Waste class: 07 01 04

SECTION 14 Transport information





14.1 UN

- UN No.: UN3082
- Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
 - (Phenol, 2,6-di-tert-butyl-)
- Hazard Class: 9
- Packing Group: III
- 14.2 Environmental hazards
 - 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
 - Not applicable
- 14.5 Road/Rail (ADR/RID)
 - ADR UN No.: UN3082
 - Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
 - (Phenol, 2,6-di-tert-butyl-)
 - ADR Hazard Class: 9
 - ADR Packing Group: III
 - ADR subrisk: -
 - ADR Flashpoint: -
- 14.6 Sea (IMDG)
 - IMDG UN No.: UN3082
 - Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
 - (Phenol, 2,6-di-tert-butyl-) MARINE POLUTANT
 - IMDG Hazard Class: 9
 - IMDG Pack Group.: III
 - IMDG EmS: F-A, S-F

SECTION 14 Transport information (....)

- IMDG subrisk: -
- IMDG Flashpoint: -

14.7 Air (ICAO/IATA)

- ICAO Un No.: UN3082
- Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

(Phenol, 2,6-di-tert-butyl-)

- ICAO Hazard Class: 9
- ICAO Packing Group: III
- ICAO subrisk: -
- ICAO Flashpoint: -

14.8 DOT / CFR (US Department of Transportation)

- Identification Number: UN3082
- DOT Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

(Phenol, 2,6-di-tert-butyl-)

- DOT Labels: 9
- Product RQ (lbs): -
- Hazardous Material: Phenol. 2.6-di-tert-butvl-
- DOT subrisk: -
- DOT Flashpoint: -

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

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:- H318: Causes serious eye damage. H410: Very toxic to aquatic life with long lasting effects. R41: Risk of serious damage to eyes. R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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

SECTION 16 Other information (....)

The most up-to-date version of this MSDS can be found on www.wilhelmsen.com/shipsservice

OTHER CONTACT INFORMATION MAJOR CHEMICAL OFFICES

Wilhelmsen Ships Service Level 17, 636 St Kilda Road Melbourne Vic 3004 AUSTRALIA Tel: +61 3 9630 0900 Emergency 24hrs: +61 3 9630 0998

Wilhelmsen Ships Service INC 210 Edgewater Street US-10305 Staten Island New York United States Telephone daytime: (+1) 718 815 1310 Fax: (+1) 718 233 3268

Wilhelmsen Ships Service INC 2200 W. Pacific Coast Highway US-90810 Long Beach California, United States Tel (+1) 562 624 8888 Fax (+1) 562 624 1011

Wilhelmsen Ships Service INC 701 Ashland Ave. Ashland Center Two, Bay 12 US- 19032 Folcroft Pennsylvania United States Tel (+1) 610 586 7801 Fax (+1) 215 701 0646

Wilhelmsen Ships Service INC. 9400 New Century Drive US-77507 Pasadena Texas United States Telephone daytime: (+1) 281 867 2000 Fax: (+1) 281 867 2800

Wilhelmsen Ships Service Ltd. Unit 3A NewtonsCourt Crossways DA2 6QL Dartford, Kent United Kingdom Tel (+44) 1322 282 412 Fax (+44) 1322 284 774

Wilhelmsen Ships Service Ltda Rua Bispo Lacerda nos.61/67 Del Catilho BR 21051120 Rio de Janeiro Brazil Tel (+55) 21 25 82 8000 Fax (+55) 21 25 82 8001

Wilhelmsen Ships Service (S) Pte Ltd 186 Pandan Loop Singapore 128376 Tel (+65) 6395 4545 Wilhelmsen Ships Service Co., Ltd 12-31 Torihama-cho Kanazawa-ku Yokohama-shi JP-236 0002, Japan Tel (+81) 45 775 0012 Fax (+81) 45 775 0070

Wilhelmsen Ships Service Hellas SA 100, D. Moutsopoulou & Serifou str GR-185 41 Piraeus Greece Tel (+ 30) 210 4239100 Fax (+ 30) 210 4212480

Wilhelmsen Ships Service AS U.A.E. Fl 24 Executive Heights, Tecom C Sheikh Zayed Road (East) Dubai United Arab Emirates Tel (+971) 4 382 3888

Wilhelmsen Ships Service AS, Willem Barentszstraat 50 3165 AB Rotterdam-Albrandswaard, the Netherlands. Tel (+31) 10 4877 777

