



MATERIAL SAFETY DATA SHEET

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

Name of MARPOL Annex 1 category:
Fuel and residual oils, including ship's bunkers.

Trade Name: Fuel Oil

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Distributor:
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Fuel Oil

The Trade Name is identical to the Description on Bill of Lading / Bunker Delivery Note and the substance name.

2. Hazards identification

Suspected of causing cancer. Repeated exposure may cause skin dryness or cracking. Harmful to aquatic life with long lasting effects.

Additional information

Prolonged or repeated inhalation of vapours may cause damage to the central nervous system.

3. Composition/information on ingredients

Einecs no.	CAS No.	Substances	Hazard Class/ Category code	w/w%
265-045-2	64741-45-3	Residues (petroleum), Atm. Tower: Heavy Fuel oil	Carc. 1B; H350 Aquatic Chronic 3; H412 EUH 066	100

Please see section 16 for the full text of the H-phrases

Other information

This product may contain significant quantities of polycyclic aromatic hydrocarbons that are classified as carcinogens.

Vapours containing Hydro Sulphide may accumulate at upper part of fuel oil tanks.

4. First aid measures

Inhalation

Seek fresh air. Seek medical advice in case of persistent discomfort.

Ingestion

Wash out mouth thoroughly and drink 1-2 glasses of water in small sips. Do not induce vomiting. Seek medical advice in case of persistent discomfort.

Skin

Remove contaminated clothing, watch and jewellery. Wash skin with soap and water. Seek medical advice in case of persistent discomfort.

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Eyes

Flush with water (preferably using eye wash equipment) until irritation subsides. Seek medical advice if symptoms persist.

Burns

Flush with water until pain ceases. Remove clothing that is not stuck to the skin – seek medical advice/transport to hospital. If possible, continue flushing until medical attention is obtained.

Other information

When obtaining medical advice, show the safety data sheet or label. Symptoms: See section 11.

5. Fire-fighting measures

Extinguish with powder, foam, carbon dioxide or water mist. Do not use water stream, as it may spread the fire. Use water or water mist to cool non-ignited stock. Move containers from danger area if it can be done without risk. Avoid inhalation of vapour and flue gases – seek fresh air. Product decomposes in fire conditions or when heated to high temperatures and inflammable and toxic gases may be released.

Use approved breathing apparatus. Insulating protective mask and clothing. Containers and tanks with product close to the fire should be cooled with water spray at a suitable safe distance.

6. Accidental release measures

Use the same personal protective equipment as stated in section 8. Notify proper authorities in case of contamination of soil or aquatic environment or discharge to drains. Smoking and naked flames prohibited. Prevent spillage from entering drains and/or surface water. Take precautionary measures against static discharges. Use spark-free tools and explosion proof equipment. Contain and absorb spill with sand or other absorbent, non-combustible material and transfer to suitable waste containers. See section 13 for instructions on disposal.

Recovery of large spillages should be maintained by special services. It is advised that stocks of adsorbent material should be held in quantities sufficient to deal with any spillages, which may be reasonably anticipated. Spillage of hot product in confined spaces may be especially hazardous due to toxic gas and hydrocarbons, the concentration which may reach exposure limits. In case of spillage on water, prevent the spread by the use of suitable barrier equipment. Recover product from the surface. The product may sink making recovery difficult.

7. Handling and storage

Handling

See section 8 for information about precautions for use and personal protective equipment. Smoking and naked flames prohibited.

Storage

Store safely, out of reach of children and away from food, animal feeding stuffs, medicines, etc. Do not store together with oxidizing agents.

Keep in tightly closed containers. Keep under lock. The room must have a warning sign for toxic substances. The sign must have a black border on a yellow background. The yellow background must cover at least 50% of the sign surface. Each side of the sign must be at least 16 cm. (DK)

Store only in equipment/container designed for the use of flammable liquids. Hydrogen sulphide



may be present in containers due to long product storage at high temperatures. Do not store fuel oil together with acids, oxygen or other oxidant cylinders in the same area.

8. Exposure controls/ personal protection

Precautions for use

Work under effective process ventilation (e.g. local exhaust ventilation). Smoking and naked flames prohibited. Take precautionary measures against static discharges. Use spark-free tools and explosion proof equipment. Eating, drinking and smoking should not be permitted where there is a risk of contamination from the carcinogenic substance. Appropriate warning signs should be used. Areas should be set aside where people can eat, drink, and smoke without risking contamination by the substance. Appropriate hygiene measures should include the establishment of a cleaning regime to remove contamination from walls, surfaces, etc. Adequate washing facilities should be provided in order to enable people exposed to meet a standard of personal hygiene consistent with adequate control of exposure and the need to avoid the spread of carcinogenic substances.

Respiratory protection

Wear respiratory protective equipment with filter A2/P2. Approved separate or air supplying respiratory equipment should be used at potential places of hydrogen sulphide accumulation.

Gloves and protective clothing

Wear suitable protective clothing. Wear coveralls with a hood. Disposable gloves made of nitrile rubber may be used if replaced immediately when contaminated.

Eye protection

Wear safety goggles if there is a risk of eye splash.

Occupational exposure limits

Ingredients	Exposure limit	Remarks
hydrogen sulphide	5 (8h), 10 (15m) ppm 7 (8h), 14 (15m) mg/m ³	(UK)

Remarks

Exposure limit for mineral oil mist 1 mg/m³ (DK)

Control methods

Compliance with the stated occupational exposure limits may be checked by occupational hygiene measurements.

9. Physical and chemical properties

State: Liquid

Colour: Black

Odour: Of hydrocarbons

Pour point: - Boiling point: -

Flash Point: Above 60 °C

Kinematic viscosity at 80 °C: < 118 cSt.



10. Stability and reactivity

The product is stable when used in accordance with the supplier's directions. Avoid heating and contact with ignition sources. Reacts with strong oxidizing agents. Product decomposes in fire conditions or when heated to high temperatures and toxic gases such as Hydrogen Sulphide may be released.

11. Toxicological information

Acute

Inhalation

The product releases organic solvent vapours which may cause lethargy and dizziness. At high concentrations, the vapours may cause headache and intoxication. Inhalation is corrosive to the upper airways. Causes a burning sensation in the nose, mouth and throat, together with sneezing, coughing, breathing difficulties and chest pain. May cause water in the lungs. May damage lung tissue.

Ingestion

Irritates mucous membranes in mouth and gastrointestinal tract.

Skin contact

Degreases and dries the skin. Repeated exposure may cause skin dryness or cracking.

Eye contact

Irritating to eyes. Causes a burning sensation and tearing.

Long-term effects

Cancer

The product contains polycyclic aromatic hydrocarbons which may cause cancer.

May cause damage to the central nervous system

Prolonged or repeated inhalation of vapours may cause damage to the central nervous system.

12. Ecological information

Avoid discharge to drain or surface water.

Ecotoxicity

Harmful to aquatic life with long lasting effects.

Mobility

The product contains a substance with high mobility in soil, which constitutes a risk for leaching to groundwater. Poor water solubility.

Persistence and degradability

Biodegradable.

Bioaccumulative potential

Contains a substance with potential for food chain accumulation.

13. Disposal considerations

Collect spills and waste in closed, leak-proof containers for disposal at the local hazardous waste site. Dispose of by incineration or other suitable means according to the requirements approved by the local authority or via licensed waste disposal contractor. For disposal be aware of potential hazards and apply all necessary safety measures. Personnel engaged in above operations should wear personal protective equipment.

Carcinogenic waste products should be clearly labelled and stored securely until such time as they are removed by a competent specialist contractor, or are disposed of safely on site by incineration or in another way that does not accentuate the risk to other workers or outside environment.

14. Transport information

The product is not covered by the rules for transport of dangerous goods by road and sea according to ADR and IMDG.

15. Regulatory information

Signal Word: Danger

Hazard Class and Category Code(s) Carc. 1B, Aquatic Chronic 3

Contains

Residues (petroleum). Atm. Tower: Heavy Fuel Oil

Hazard Statement

H350 May cause cancer.
H412 Harmful to aquatic life with long lasting effects.

P-phrases

P202 Do not handle until all safety precautions have been read and un
P273 Avoid release to the environment
P281 Use personal protective equipment as required
P308+P313 IF exposed or concerned: Get medical advice/attention
P405 Store Locked up
P501 Dispose of content/container according to the requirements given by the local authorities



Other labelling

EUH 066 Repeated exposure may cause skin dryness or cracking
Restricted to professional users.

Restrictions on use

Special care should be applied for employees under the age of 18. Young people under the age of 18 may not carry out any work causing harmful exposure to this product.



Chemical safety assessment

Chemical safety assessment has not been performed.

16. Other information

Special rules for industrial use

A written evaluation of safety and health conditions related to performing the work must be prepared, and the evaluation must be made available to the employees at the place of work.

Training requirement

No special training is required, but a thorough knowledge of this safety data sheet should be a pre-requisite condition.

Line of business

Fuel industry.

Packaging

Tank truck or ship.

Sources used

Approved Supply List (seventh edition): Information approved for the classification and labelling of substances and preparations dangerous for supply. Chemicals (Hazard Information and Packaging for Supply) Regulations 2002, 29. ATP.

This safety data sheet was prepared on the basis of current EU legislation.

REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing

Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006

Statutory Instrument 2002 No. 2677. The Control of Substances Hazardous to Health Regulations 2002.

Other information

This safety data sheet was prepared from information provided by the supplier about the product at the time of preparation (e.g. data sheets and the like).

Full text of the H-phrases that are stated in section 3.

H350	May cause cancer.
EUH 066	Repeated exposure may cause skin dryness or cracking.
H412	Harmful to aquatic life with long lasting effects.