MATERIAL SAFETY DATA SHEET
(SOLAS regulation VI/5-1 format)

SECTION 1  PRODUCT AND COMPANY IDENTIFICATION

PRODUCT
Product Name: MARINE DISTILLATE OIL
Alternate Product Name: MDO - DMB
Product Description: Hydrocarbons and Additives
Product Code: 708442
Intended Use: Fuel
MARPOL Annex I Category: Fuel and residual oils, including ship's bunkers
See Section 14 for transportation information related to the Bill of Lading, other shipping documents

COMPANY IDENTIFICATION

<table>
<thead>
<tr>
<th>Country</th>
<th>Company</th>
<th>Emergency Telephone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>International Sales</td>
<td>ExxonMobil Marine Fuels ExxonMobil House MP 31 Emyrn Way Leatherhead, KT22 8UX UK</td>
<td>+44 (0)23 80891558</td>
</tr>
<tr>
<td>Belgium</td>
<td>ExxonMobil Petroleum &amp; Chemical BVBA Polderdijkweg Haven 447 - 2030 Antwerp, Belgium</td>
<td>(UK) 01372 222 000 (IE) +44 1372 222 000</td>
</tr>
<tr>
<td>Canada</td>
<td>Imperial Oil 505 Quarry Park Boulevard SE Calgary, AB T2C 5N1 Canada</td>
<td>1-866-232-9563</td>
</tr>
<tr>
<td>France</td>
<td>Esso SAF Tour Manhattan La Defense 2 5/6 Place de l'Iris 92400 Courbevoie France</td>
<td>+33 08 1000 3353</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>ExxonMobil Hong Kong Limited: 2201, 22/F, Central Plaza 18 Harbour Road, Wanchai, Hong Kong</td>
<td>+1 609 737 4411</td>
</tr>
<tr>
<td>Italy</td>
<td>Esso Italiana SRL Viale Castello della Magliana 25 Rome 00148 Italy</td>
<td>+39 0382 24444</td>
</tr>
<tr>
<td>New Zealand</td>
<td>Mobil Oil New Zealand Limited Vero Centre 48 Shortland Street Auckland 1140 New Zealand</td>
<td>National Poison Center +64 3 479 7248 Freephone 0800 764 766</td>
</tr>
<tr>
<td>Norway</td>
<td>Esso Norge AS Drammensveien 149 Skøyen N-0213 Oslo, Norway</td>
<td>Emergency: +47 33 37 73 00 Poison: +47 22 59 13 00</td>
</tr>
<tr>
<td>Singapore</td>
<td>ExxonMobil Asia Pacific Pte Limited 1 HarbourFront Place #06-00 HarbourFront Tower One</td>
<td>01-609-737-4411</td>
</tr>
</tbody>
</table>
This (M)SDS is a document with no country specific information included.

**SECTION 2  HAZARDS IDENTIFICATION**

This material is hazardous according to UN GHS Criteria. Classification includes all GHS hazard classes. For hazard categories with two cut-off/concentration limits, classification was based on the higher limit.

**GHS CLASSIFICATION:**

Flammable liquid: Category 3.
Acute inhalation toxicant: Category 4.
Skin irritation: Category 2.
Carcinogen: Category 1B.
Reproductive toxicant (developmental): Category 2.
Specific target organ toxicant (repeated exposure): Category 2.
Aspiration toxicant: Category 1.
Acute aquatic toxicant: Category 1.
Chronic aquatic toxicant: Category 1.

**GHS Label Elements:**

- **Pictogram:**
  - Flammable liquid
  - Health hazard
  - Chemical hazard
  - Environmental hazard

- **Signal Word:** Danger

**Hazard Statements:**

Health: H304: May be fatal if swallowed and enters airways. H315: Causes skin irritation. H332: Harmful if inhaled. H350: May cause cancer. H361: Suspected of damaging the unborn child. H373: May cause damage to organs through prolonged or repeated exposure.
Environmental: H410: Very toxic to aquatic life with long lasting effects.

**Precautionary Statements:**

Prevention: P201: Obtain special instructions before use. P202: Do not handle until all safety precautions have been read and understood. P210: Keep away from heat/sparks/open flames/hot surfaces. -- No smoking. P233: Keep


**Contains:** FUEL OIL, RESIDUAL; FUELS, DIESEL

Other hazard information:

**Physical / Chemical Hazards**
Material can accumulate static charges which may cause an ignition. Material can release vapours that readily form flammable mixtures. Vapour accumulation could flash and/or explode if ignited.

**Health Hazards**
High-pressure injection under skin may cause serious damage. Under conditions of poor personal hygiene and prolonged repeated contact, some polycyclic aromatic compounds (PACs) have been suspected as a cause of skin cancer in humans. Hydrogen sulphide, a highly toxic gas, may be present. Signs and symptoms of overexposure to hydrogen sulphide include respiratory and eye irritation, dizziness, nausea, coughing, a sensation of dryness and pain in the nose, and loss of consciousness. Odour does not provide a reliable indicator of the presence of hazardous levels in the atmosphere. May be irritating to the eyes, nose, throat, and lungs.

**Environmental Hazards**
No additional hazards.

**NOTE:** This material should not be used for any other purpose than the intended use in Section 1 without expert advice. Health studies have shown that chemical exposure may cause potential human health risks which may vary from person to person.

### SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

This material is defined as a mixture.

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS#</th>
<th>Concentration*</th>
<th>GHS Hazard Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>FUEL OIL, RESIDUAL</td>
<td>68476-33-5</td>
<td>&lt; 30%</td>
<td>H332, H350(1B), H361(D), H373, H400(M factor 1), H410(M factor 1)</td>
</tr>
<tr>
<td>FUELS, DIESEL</td>
<td>68334-30-5</td>
<td>&gt; 70 %</td>
<td>H227, H304, H332, H351, H315, H373, H401, H411</td>
</tr>
</tbody>
</table>
# Hazardous Constituent(s) Contained in Complex Substance(s) required for disclosure

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS#</th>
<th>Concentration*</th>
<th>GHS Hazard Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>HYDROGEN SULPHIDE</td>
<td>7783-06-4</td>
<td>&lt; 0.1%</td>
<td>H220, H280, H330(2), H400(M factor 1)</td>
</tr>
</tbody>
</table>

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

## SECTION 4 FIRST AID MEASURES

## INHALATION
Immediately remove from further exposure. Get immediate medical assistance. For those providing assistance, avoid exposure to yourself or others. Use adequate respiratory protection. Give supplemental oxygen, if available. If breathing has stopped, assist ventilation with a mechanical device.

## SKIN CONTACT
Remove contaminated clothing. Dry wipe exposed skin and cleanse with waterless hand cleaner and follow by washing thoroughly with soap and water. For those providing assistance, avoid further skin contact to yourself or others. Wear impervious gloves. Launder contaminated clothing separately before reuse. Discard contaminated articles that cannot be laundered. If product is injected into or under the skin, or into any part of the body, regardless of the appearance of the wound or its size, the individual should be evaluated immediately by a physician as a surgical emergency. Even though initial symptoms from high pressure injection may be minimal or absent, early surgical treatment within the first few hours may significantly reduce the ultimate extent of injury.

## EYE CONTACT
Flush thoroughly with water. If irritation occurs, get medical assistance.

## INGESTION
Seek immediate medical attention. Do not induce vomiting.

## ACUTE AND DELAYED SYMPTOMS/EFFECTS
See Toxicological Section

## NOTE TO PHYSICIAN
If ingested, material may be aspirated into the lungs and cause chemical pneumonitis. Treat appropriately.

## PRE-EXISTING MEDICAL CONDITIONS WHICH MAY BE AGGRAVATED BY EXPOSURE
Contains hydrocarbon solvent/petroleum hydrocarbons; skin contact may aggravate an existing dermatitis.

## SECTION 5 FIRE FIGHTING MEASURES

## EXTINGUISHING MEDIA
**Appropriate Extinguishing Media:** Use water fog, foam, dry chemical or carbon dioxide (CO2) to extinguish flames.

**Inappropriate Extinguishing Media:** Straight streams of water

## FIRE FIGHTING
**Fire Fighting Instructions:** Evacuate area. Prevent run-off from fire control or dilution from entering streams,
sewers or drinking water supply. Fire-fighters should use standard protective equipment and in enclosed spaces, self-contained breathing apparatus (SCBA). Use water spray to cool fire exposed surfaces and to protect personnel.

Unusual Fire Hazards: Hazardous material. Firefighters should consider protective equipment indicated in Section 8.

Hazardous Combustion Products: Aldehydes, Hydrogen sulphide, Incomplete combustion products, Oxides of carbon, Smoke, Fume, Sulphur oxides

FLAMMABILITY PROPERTIES
Flash Point [Method]: >=60°C (140°F) [Typical]
Flammable Limits (Approximate volume % in air): LEL: 1.0  UEL: 6.0
Autoignition Temperature: >250°C (482°F)

SECTION 6  ACCIDENTAL RELEASE MEASURES

NOTIFICATION PROCEDURES
In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

PROTECTIVE MEASURES
Avoid contact with spilled material. Warn or evacuate occupants in surrounding and downwind areas if required, due to toxicity or flammability of the material. See Section 5 for fire fighting information. See the Hazard Identification Section for Significant Hazards. See Section 4 for First Aid Advice. See Section 8 for advice on the minimum requirements for personal protective equipment. Additional protective measures may be necessary, depending on the specific circumstances and/or the expert judgment of the emergency responders.

For emergency responders: Respiratory protection: half-face or full-face respirator with filter(s) for organic vapor and, when applicable, H2S, or Self Contained Breathing Apparatus (SCBA) can be used depending on the size of spill and potential level of exposure. If the exposure cannot be completely characterized or an oxygen deficient atmosphere is possible or anticipated, SCBA is recommended. Work gloves that are resistant to aromatic hydrocarbons are recommended. Note: gloves made of polyvinyl acetate (PVA) are not water-resistant and are not suitable for emergency use. Chemical goggles are recommended if splashes or contact with eyes is possible. Small spills: normal antistatic work clothes are usually adequate. Large spills: full body suit of chemical resistant, antistatic material is recommended.

SPILL MANAGEMENT
Land Spill: Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop leak if you can do so without risk. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material. Prevent entry into waterways, sewer, basements or confined areas. A vapour-suppressing foam may be used to reduce vapour. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Use clean non-sparking tools to collect absorbed material. Large Spills: Water spray may reduce vapour, but may not prevent ignition in enclosed spaces.

Water Spill: Stop leak if you can do so without risk. Confine the spill immediately with booms. Warn other shipping. Remove from the surface by skimming or with suitable absorbents. Seek the advice of a specialist before using dispersants.

Water spill and land spill recommendations are based on the most likely spill scenario for this material; however, geographic conditions, wind, temperature, (and in the case of a water spill) wave and current direction and speed may greatly influence the appropriate action to be taken. For this reason, local experts should be
consulted. Note: Local regulations may prescribe or limit action to be taken.

ENVIRONMENTAL PRECAUTIONS
Large Spills: Dyke far ahead of liquid spill for later recovery and disposal. Prevent entry into waterways, sewers, basements or confined areas.

SECTION 7  HANDLING AND STORAGE

HANDLING
Avoid all personal contact. Do not siphon by mouth. Harmful amounts of H2S may be present. The toxic and olfactory (sense of smell) fatigue properties of hydrogen sulfide require that air monitoring alarms and respiratory protection be used where the concentration might be expected to reach a harmful level, such as in an enclosed space, heated transport vessel, or in a spill or leak situation.

Do not use as a cleaning solvent or other non-motor fuel uses. For use as a motor fuel only. It is dangerous and/or unlawful to put petrol into unapproved containers. Do not fill container while it is in or on a vehicle. Static electricity may ignite vapour and cause fire. Place container on ground when filling and keep nozzle in contact with container. Do not use electronic devices (including but not limited to cellular phones, computers, calculators, pagers or other electronic devices etc) in or around any fuelling operation or storage area unless the devices are certified intrinsically safe by an approved national testing agency and to the safety standards required by national and/or local laws and regulations. Prevent small spills and leakage to avoid slip hazard. Material can accumulate static charges which may cause an electrical spark (ignition source). Use proper bonding and/or ground procedures. However, bonding and grounds may not eliminate the hazard from static accumulation. Consult local applicable standards for guidance. Additional references include American Petroleum Institute 2003 (Protection Against Ignitions Arising out of Static, Lightning and Stray Currents) or National Fire Protection Agency 77 (Recommended Practice on Static Electricity) or CENELEC CLC/TR 50404 (Electrostatics - Code of practice for the avoidance of hazards due to static electricity).

Static Accumulator: This material is a static accumulator. A liquid is typically considered a nonconductive, static accumulator if its conductivity is below 100 pS/m (100x10E-12 Siemens per meter) and is considered a semiconductive, static accumulator if its conductivity is below 10,000 pS/m. Whether a liquid is nonconductive or semiconductive, the precautions are the same. A number of factors, for example liquid temperature, presence of contaminants, anti-static additives and filtration can greatly influence the conductivity of a liquid.

STORAGE
The type of container used to store the material may affect static accumulation and dissipation. Keep container closed. Handle containers with care. Open slowly in order to control possible pressure release. Store in a cool, well-ventilated area. Storage containers should be earthed and bonded. Fixed storage containers, transfer containers and associated equipment should be earthed and bonded to prevent accumulation of static charge. Keep away from incompatible materials.

SECTION 8  EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE LIMIT VALUES

Exposure limits/standards (Note: Exposure limits are not additive)

<table>
<thead>
<tr>
<th>Substance Name</th>
<th>Form</th>
<th>Limit/Standard</th>
<th>Note</th>
<th>Source</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>FUEL OIL, RESIDUAL</td>
<td>Total oil mist</td>
<td>TWA</td>
<td>0.1 mg/m3</td>
<td>benzene solubles</td>
<td>ExxonMobil</td>
</tr>
<tr>
<td>FUELS, DIESEL</td>
<td>Stable Aerosol.</td>
<td>TWA</td>
<td>5 mg/m3</td>
<td></td>
<td>ExxonMobil</td>
</tr>
<tr>
<td>FUELS, DIESEL</td>
<td>Vapour.</td>
<td>TWA</td>
<td>200 mg/m3</td>
<td></td>
<td>ExxonMobil</td>
</tr>
</tbody>
</table>
FUELS, DIESEL [total hydrocarb., vapour&aerosol]  

<table>
<thead>
<tr>
<th>Substance</th>
<th>Workplace暴露限值</th>
<th>个人暴露限值</th>
<th>ACNIH</th>
<th>年份</th>
</tr>
</thead>
<tbody>
<tr>
<td>HYDROGEN SULPHIDE</td>
<td>STEL 14 mg/m3</td>
<td>10 ppm</td>
<td>ExxonMobil</td>
<td>2015</td>
</tr>
<tr>
<td>HYDROGEN SULPHIDE</td>
<td>TWA 7 mg/m3</td>
<td>5 ppm</td>
<td>ExxonMobil</td>
<td>2015</td>
</tr>
</tbody>
</table>

**Biological limits**

No biological limits allocated.

**NOTE**: Limits/standards shown for guidance only. Follow applicable regulations.

**ENGINEERING CONTROLS**

The level of protection and types of controls necessary will vary depending upon potential exposure conditions.

Control measures to consider:

- Use explosion-proof ventilation equipment to stay below exposure limits.

**PERSONAL PROTECTION**

Personal protective equipment selections vary based on potential exposure conditions such as applications, handling practices, concentration and ventilation. Information on the selection of protective equipment for use with this material, as provided below, is based upon intended, normal usage.

**Respiratory Protection**: If engineering controls do not maintain airborne contaminant concentrations at a level which is adequate to protect worker health, an approved respirator may be appropriate. Respirator selection, use, and maintenance must be in accordance with regulatory requirements, if applicable. Types of respirators to be considered for this material include:

- Positive-pressure, air-supplied respirator in areas where H2S vapours may accumulate is recommended.

For high airborne concentrations, use an approved supplied-air respirator, operated in positive pressure mode. Supplied air respirators with an escape bottle may be appropriate when oxygen levels are inadequate, gas/vapour warning properties are poor, or if air purifying filter capacity/rating may be exceeded.

**Hand Protection**: Any specific glove information provided is based on published literature and glove manufacturer data. Glove suitability and breakthrough time will differ depending on the specific use conditions. Contact the glove manufacturer for specific advice on glove selection and breakthrough times for your use conditions. Inspect and replace worn or damaged gloves. The types of gloves to be considered for this material include:

- Chemical resistant gloves are recommended. If contact with forearms is likely wear gauntlet style gloves. Nitrile, Viton

**Eye Protection**: If contact with material is likely, chemical goggles are recommended.

**Skin and Body Protection**: Any specific clothing information provided is based on published literature or manufacturer data. The types of clothing to be considered for this material include:
Chemical/oil resistant clothing is recommended.

**Specific Hygiene Measures:** Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned. Practice good housekeeping.

**ENVIRONMENTAL CONTROLS**
Comply with applicable environmental regulations limiting discharge to air, water and soil. Protect the environment by applying appropriate control measures to prevent or limit emissions.

**SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES**

Note: Physical and chemical properties are provided for safety, health and environmental considerations only and may not fully represent product specifications. Contact the Supplier for additional information.

**GENERAL INFORMATION**
- Physical State: Liquid
- Colour: Brown
- Odour: Petroleum/Solvent
- Odour Threshold: N/D

**IMPORTANT HEALTH, SAFETY, AND ENVIRONMENTAL INFORMATION**
- Relative Density (at 15 °C): 0.8 - 0.92
- Flammability (Solid, Gas): N/A
- Flash Point [Method]: >=60°C (140°F) [Typical]
- Flammable Limits (Approximate volume % in air): LEL: 1.0 UEL: 6.0
- Autoignition Temperature: >250°C (482°F)
- Boiling Point / Range: > 180°C (356°F)
- Decomposition Temperature: N/D
- Vapour Density (Air = 1): > 2 at 101 kPa
- Vapour Pressure: < 0.04 kPa (0.3 mm Hg) at 20 °C
- Evaporation Rate (n-butyl acetate = 1): N/D
- pH: N/D
- Log Pow (n-Octanol/Water Partition Coefficient): > 3.5
- Solubility in Water: Negligible
- Viscosity: <7 cSt (7 mm2/sec) at 40°C - 14 cSt (14 mm2/sec) at 40°C
- Oxidizing Properties: See Hazards Identification Section.

**OTHER INFORMATION**
- Freezing Point: N/D
- Melting Point: N/A
- Pour Point: < 6°C (43°F)

**SECTION 10 STABILITY AND REACTIVITY**

**STABILITY:** Material is stable under normal conditions.
CONDITIONS TO AVOID: Open flames and high energy ignition sources.

MATERIALS TO AVOID: Alkalies, Halogens, Strong Acids, Strong Bases, Strong oxidisers

HAZARDOUS DECOMPOSITION PRODUCTS: Material does not decompose at ambient temperatures.

POSSIBILITY OF HAZARDOUS REACTIONS: Hazardous polymerization will not occur.

SECTION 11 TOXICOLOGICAL INFORMATION

<table>
<thead>
<tr>
<th>Route of Exposure</th>
<th>Conclusion / Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhalation</td>
<td>Toxicity: No end point data for material. Moderately toxic. Based on assessment of the components.</td>
</tr>
<tr>
<td></td>
<td>Irritation: No end point data for material. Elevated temperatures or mechanical action may form vapours, mist, or fumes which may be irritating to the eyes, nose, throat, or lungs.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>Toxicity: No end point data for material. Minimally Toxic. Based on assessment of the components.</td>
</tr>
<tr>
<td>Skin</td>
<td>Toxicity: No end point data for material. Minimally Toxic. Based on assessment of the components.</td>
</tr>
<tr>
<td></td>
<td>Irritation: No end point data for material. Irritating to the skin. Based on assessment of the components.</td>
</tr>
<tr>
<td>Eye</td>
<td>Irritation: No end point data for material. May cause mild, short-lasting discomfort to eyes. Based on assessment of the components.</td>
</tr>
</tbody>
</table>

OTHER HEALTH EFFECTS FROM SHORT AND LONG TERM EXPOSURE

Anticipated health effects from sub-chronic, chronic, respiratory or skin sensitization, mutagenicity, reproductive toxicity, carcinogenicity, target organ toxicity (single exposure or repeated exposure), aspiration toxicity and other effects based on human experience and/or experimental data.

For the product itself:

Vapour concentrations above recommended exposure levels are irritating to the eyes and the respiratory tract, may cause headaches and dizziness, are anaesthetic and may have other central nervous system effects. Small amounts of liquid aspirated into the lungs during ingestion or from vomiting may cause chemical pneumonitis or pulmonary edema. Diesel exhaust fumes: Carcinogenic in animal tests. Inhalation exposures to exhaust for 2 years in test animals resulted in lung tumours and lymphoma. Extract of particulate produced skin tumours in test animals. Caused mutations in-vitro.

Contains:

Diesel fuel: Carcinogenic in animal tests. Caused mutations in-vitro. Repeated dermal exposures to high concentrations in test animals resulted in reduced litter size and litter weight, and increased fetal resorptions at maternally toxic doses. Dermal exposure to high concentrations resulted in severe skin irritation with weight loss and some mortality. Inhalation exposure to high concentrations resulted in respiratory tract irritation, lung changes/infiltration/accumulation, and reduction in lung function. HYDROGEN SULPHIDE: Chronic health effects due to repeated exposures to low levels of H2S have not been established. High level (700 ppm) acute
Exposure can result in sudden death. High concentrations will lead to cardiopulmonary arrest due to nervous system toxicity and pulmonary edema. Lower levels (150 ppm) may overwhelm sense of smell, eliminating warning of exposure. Symptoms of overexposure to H2S include headache, fatigue, insomnia, irritability, and gastrointestinal problems. Repeated exposures to approximately 25 ppm will irritate mucous membranes and the respiratory system and have been implicated in some eye damage. Residual fuel oil: Carcinogenic in animal tests. Caused mutations in vitro. Dermal exposure to high concentrations resulted in maternal toxicity, decreased fetal weight and fetal survival, and some external fetal malformations. Dermal studies in animals: increased mortality, skin irritation, liver, kidney, thymus, bone marrow, blood and lymphoid tissue toxic effects. Possible allergen and photoallergen.

**IARC Classification:**
The following ingredients are cited on the lists below:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS Number</th>
<th>List Citations</th>
</tr>
</thead>
<tbody>
<tr>
<td>FUEL OIL, RESIDUAL</td>
<td>68476-33-5</td>
<td>3</td>
</tr>
</tbody>
</table>

--REGULATORY LISTS SEARCHED--
1 = IARC 1
2 = IARC 2A
3 = IARC 2B

**SECTION 12 ECOLOGICAL INFORMATION**
The information given is based on data available for the material, the components of the material, and similar materials.

**ECOTOXICITY**
Material -- Expected to be very toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

**MOBILITY**
More volatile component -- Highly volatile, will partition rapidly to air. Not expected to partition to sediment and wastewater solids.
High molecular wt. component -- Low solubility and floats and is expected to migrate from water to the land. Expected to partition to sediment and wastewater solids.

**PERSISTENCE AND DEGRADABILITY**
**Biodegradation:**
Material -- Expected to be inherently biodegradable

**Atmospheric Oxidation:**
More volatile component -- Expected to degrade rapidly in air

**INTERNATIONAL OIL POLLUTION COMPENSATION (IOPC)**
Material is considered a persistent oil.

**SECTION 13 DISPOSAL CONSIDERATIONS**
DISPOSAL METHODS

Disposal recommendations based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal.

MARPOL - see International Convention for the Prevention of Pollution from Ships (MARPOL 73/78) which provides technical aspects at controlling pollutions from ships.

DISPOSAL RECOMMENDATIONS

Product is suitable for burning in an enclosed controlled burner for fuel value or disposal by supervised incineration at very high temperatures to prevent formation of undesirable combustion products.

Empty Container Warning Empty Container Warning (where applicable): Empty containers may contain residue and can be dangerous. Do not attempt to refill or clean containers without proper instructions. Empty drums should be completely drained and safely stored until appropriately reconditioned or disposed. Empty containers should be taken for recycling, recovery, or disposal through suitably qualified or licensed contractor and in accordance with governmental regulations. DO NOT PRESSURISE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OR DEATH.

SECTION 14 TRANSPORT INFORMATION

SEA (IMDG)
- Proper Shipping Name: GAS OIL
- Hazard Class & Division: 3
- EMS Number: F-E, S-E
- UN Number: 1202
- Packing Group: III
- Marine Pollutant: Yes
- Label(s): 3
- Transport Document Name: UN1202, GAS OIL, 3, PG III, (60°C c.c.), MARINE POLLUTANT

Note - this material is being carried under the scope of MARPOL Annex I

SECTION 15 REGULATORY INFORMATION

REGULATORY STATUS AND APPLICABLE LAWS AND REGULATIONS

Listed or exempt from listing/notification on the following chemical inventories: AICS, DSL, ENCS, IECSC, KECI, PICCS, TSCA

SECTION 16 OTHER INFORMATION

N/D = Not determined, N/A = Not applicable

KEY TO THE H-CODES CONTAINED IN SECTION 3 OF THIS DOCUMENT (for information only):
- H220: Extremely flammable gas; Flammable Gas, Cat 1
- H227: Combustible liquid; Flammable Liquid, Cat 4
- H280: Contains gas under pressure; may explode if heated; Pressurized Gas
- H304: May be fatal if swallowed and enters airways; Aspiration, Cat 1
H315: Causes skin irritation; Skin Corr/Irritation, Cat 2
H330(2): Fatal if inhaled; Acute Tox Inh, Cat 2
H332: Harmful if inhaled; Acute Tox Inh, Cat 4
H350(1B): May cause cancer; Carcinogenicity, Cat 1B
H351: Suspected of causing cancer; GHS Carcinogenicity, Cat 2
H361(D): Suspected of damaging the unborn child; Repro Tox, Cat 2 (Develop)
H373: May cause damage to organs through prolonged or repeated exposure; Target Organ, Repeated, Cat 2
H400: Very toxic to aquatic life; Acute Env Tox, Cat 1
H401: Toxic to aquatic life; Acute Env Tox, Cat 2
H410: Very toxic to aquatic life with long lasting effects; Chronic Env Tox, Cat 1
H411: Toxic to aquatic life with long lasting effects; Chronic Env Tox, Cat 2

THIS MATERIAL SAFETY DATA SHEET CONTAINS THE FOLLOWING REVISIONS:

GHS Precautionary Statements - Prevention information was modified.
GHS Precautionary Statements - Response information was modified.
Section 01: IMO R&S Emergency Numbers information was modified.
Section 05: Fire Fighting Measures - Fire Fighting Instruction information was modified.
Section 05: Hazardous Combustion Products information was modified.
Section 06: Accidental Release - Spill Management - Land information was modified.
Section 06: Protective Measures information was modified.
Section 07: Handling and Storage - Handling information was modified.
Section 07: Handling and Storage - Storage Phrases information was modified.
Section 08: Exposure Limits Table information was modified.
Section 10: Materials To Avoid information was modified.
Section 11: Other Health Effects information was added.

Revision Date: 23 Sep 2016

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