MATERIAL SAFETY DATA SHEET
READ AND UNDERSTAND MATERIAL SAFETY DATA SHEET BEFORE HANDLING OR DISPOSING OF PRODUCT

1. Identification of the substance/preparation and the company

Identification of the substance: Marine Gas Oil
Company identification: Jmd Shipping & Trading Fze
Safi Zone , P.O.Box 9054
Sharjah - United Arab Emirates
Tel : +9716 557 3640
tax: +9716 557 3641
Emergency telephone No :
T +9716 5573640

2. Composition/information on ingredients

<table>
<thead>
<tr>
<th>Name</th>
<th>% wt</th>
<th>CAS No.</th>
<th>EC No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marine Gas Oil</td>
<td>90%</td>
<td>68334-30-5</td>
<td>269-822-7</td>
</tr>
</tbody>
</table>

R 40 Limited evidence of a carcinogenic effect.
R 65 Harmful: may cause lung damage if swallowed.
R 66 Repeated exposure may cause skin dryness or cracking
R 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Product contains small amounts of additives.

3. Hazards identification

Product classification CARCINOGENIC CATEGORY 3 HARMFUL
DANGEROUS FOR THE ENVIRONMENT

Hazard Pictograms

Acute effects of exposure to man

Inhalation Vapours or mist may cause irritation of the nose and throat, headache, nausea, vomiting, dizziness, drowsiness, euphoria loss of coordination and disorientation. In poorly ventilated areas or confined spaces, unconsciousness and asphyxiation may result

Inhalation of vapours or mist may result in the absorption of potentially harmful amounts of material.
<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Skin contact</strong></td>
<td>Brief contact may cause slight irritation. Prolonged contact, as with clothing wetted with material, may cause more severe irritation and discomfort, seem as local redness and swelling.</td>
</tr>
<tr>
<td></td>
<td>Believed not to be a skin sensitiser.</td>
</tr>
<tr>
<td><strong>Eye contact</strong></td>
<td>May cause irritation, experienced as mild discomfort and seen as slight excess redness of the eye.</td>
</tr>
<tr>
<td><strong>Ingestion</strong></td>
<td>If more than several mouthfuls are swallowed, abdominal discomfort nausea and diarrhoea may occur.</td>
</tr>
<tr>
<td></td>
<td>Aspiration may occur during swallowing or vomiting, resulting in lung damage.</td>
</tr>
<tr>
<td><strong>Chronic effects of exposure to man</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Medical conditions aggravated by exposure</strong></td>
<td>Because of its irritating properties, repeated skin contact may aggravate an existing dermatitis (skin condition).</td>
</tr>
<tr>
<td><strong>Other remarks</strong></td>
<td>Possible risk of irreversible effects.</td>
</tr>
<tr>
<td><strong>Effects of exposure to the environment</strong></td>
<td>Some short-term toxicity to aquatic and marine organisms.</td>
</tr>
</tbody>
</table>

### 4. First-aid measures

**Route of exposure**

**Inhalation**
- Remove the affected person to fresh air. If not breathing or has stopped breathing administer artificial respiration. Give cardiac massage if necessary. If the person is breathing, but unconscious, place in the recovery position. Obtain medical assistance immediately.

**Skin contact**
- Wash skin with plenty of soap and water. Contaminated clothing should be soaked with water, removed and laundered before reuse.

**Eye contact**
- Immediately flush eyes with copious quantities of water. If irritation persists refer for medical attention.

**Ingestion**
- Do not induce vomiting. If ingestion is suspected, wash out the mouth with water and send to hospital immediately.

**Other recommendations**
- Aspiration of this product during induced intubation
- Remove and dry-clean or launder clothing with handling contaminated clothing.

### 5. Fire-fighting measures

**Suitable extinguishing media**
- Use water fog, dry powder, foam or carbon dioxide. Use water to cool fire-exposed containers. If a leak or spill has not ignited, use water fog to disperse the vapours and to provide protection for personnel attempting to stop the leak.
Extinguishing media which must not be used for safety reasons

Water jet

Special exposure hazards arising from the substance or preparation itself,

Hydrogen sulphide (H2S) may be released when heated

In case of fire - Always call the fire brigade. Small fires, such as those capable of being fought with a hand-held extinguisher, can normally be fought by a person who has received instruction on the hazards of flammable liquid fires. Fires that are beyond that stage should only be tackled by people who have received hands-on training.

Ensure escape path is available.

Special protective equipment for firefighters

The nature of special protective equipment required will depend upon the size of the fire, the degree of confinement of the fire and the nature ventilation available. Fire-resistant clothing and self-contained breathing apparatus is recommended for fire in confined spaces and poorly ventilated areas. Full fire-proof clothing is recommended for any large fires involving this product.

Other information

Keep adjacent drums and tanks cool by spraying with water from a safe location. If possible remove them from danger zone. If adequate cooling cannot be achieved, the area needs to be evacuated, and further fire fighting and cooling attempts should be carried out from a safe location.

5. Accidental release measures

Personal Precaution

Remove all possible sources of ignition in the surrounding area.

Procedures in case of accidental release or leakage

Evacuate all personnel. Do not breathe fumes or vapour. DO Not operate electrical equipment. Avoid contact with skin, eyes, clothing. Ventilate contaminated area thoroughly. Wear chemical resistant knee length safety boots and PVC jacket and trousers. Wear safety glass or full face shield if splashes are likely to occur.

Environmental precautions

Prevent from spreading or entering into drains and surface waters (e.g. lakes, ponds, ditches, rivers and streams) by using sand, earth or other appropriate non-combustible barriers. Inform local authorities if impacts cannot be prevented.

Clean-up methods – Small Spillages

To minimise soil and groundwater contamination, absorb liquid with sand, earth or other recommended absorbent material as soon as possible. Sweep up and remove to suitable, clearly marked container for disposal in accordance with local regulations. DO Not disperse using water or detergent.

Clean-up method – Large Spillages

Prevent from spreading by making a barrier with sand, earth or other containment material. Reclaim liquid directly or in suitable absorbent. Disposal as for small spillages.
Maritime spillages

Any spillage must be dealt with using a Shipboard Oil Pollution Emergency Plan as required by MARPOL Annex 1, Regulation 26.

Other information

Local authorities should be advised if significant spillages cannot be contained. Observe all relevant local regulations. Advice may be obtained from Environment Agency……….. (24hr Emergency No.)

7. Handling and storage

Handling

Local exhaust ventilation recommended if generating vapour, dust or mist if exhaust ventilation is not available or inadequate, use approved respirator as appropriate.

This product may contain volatile hydrocarbons which may accumulate in the container headspace, thereby creating a flammable or explosive atmosphere, hydrogen sulphide (H2S) may be released when heated.

Storage

Transport, handle and store in accordance with applicable local regulations and only in labelled containers designed for this product. Ground and bond shipping container, transfer line, and receiving container. Keep away from sparks, flame and other source of ignition. Protect containers against static electricity, lightning & physical damage. Hot work (eg cutting or welding) must not be carried out on or near any container used for storage of this product unless it has been made safe by purging or other suitable means.

8. Exposure controls and personal protection

Respiratory protection

Airborne concentrations should be kept to lowest levels possible. if vapour, mist or cleaning large spills or upon entry into tanks vessels or other confined spaces, cleaning large spills or upon entry into tanks, vessels, or other confined spaces. Oxygen levels should be at least 19.5 % in confined spaces or other work areas.

Hand and skin protection

Protective clothing such as flame retardant uniforms, coveralls or lab coats should be worn. Launder or dry clean when soiled. North red PVC gloves, Nitrile Rubber or Viton gloves and lace up safety boots with steel toecaps resistant to chemicals and petroleum distillates required.

Eye protection

Safety glasses, chemical type goggles or full face shield recommended to prevent eye contact.

Exposure limit for the product None established for product.

9. Physical and chemical properties

Appearance

Light / Dark Amber

Odour

Characteristic hydrocarbon

Flashpoint
## Kinematic Viscosity @ 40°C

<table>
<thead>
<tr>
<th>Density @15°C</th>
<th>Kinematic Viscosity @ 40°C</th>
<th>Boiling point / range, C</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>160-400°C</td>
</tr>
</tbody>
</table>

## 10. Stability and reactivity

**Conditions to avoid**
Sources of ignition such as flames, sparks, hot surfaces.

**Materials to avoid**
Avoid contact with strong oxidising agents. Eg chlorates and ammonium nitrate which may be used in agriculture.

**Hazardous decomposition**
Oxides of carbon, nitrogen and sulphur, aldehydes and ketones. Hydrogen sulphide (H₂S) may be released on heating and may accumulate in confined spaces.

## 11. Toxicological information

### Acute

**Inhalation**
Likely to be irritating to the respiratory tract if high concentrations of mists or vapour are inhaled.
May cause nausea, dizziness, headaches and drowsiness if high concentrations of vapour are inhaled.
May be toxic when hydrogen sulphide is present in the vapour.

**Skin contact**
Repeated exposure may cause skin dryness or cracking.
Believed not to be a skin sensitiser.

**Eye contact**
Slightly irritating to the eyes.

**Ingestion**
Unlikely to cause harm if accidentally swallowed in small doses, though larger quantities may cause nausea and diarrhoea. Will injure the lungs if aspiration occurs, eg during vomiting.

### Chronic
This product, or a component of this product, has caused skin cancer when repeatedly applied to the skin of laboratory animals without any effort to remove the material between applications.

### Other information
High pressure injection of product into the skin may lead to local necrosis if the product is not surgically removed.

## 12. Ecological information

**Mobility**
Spillages may penetrate the soil causing ground water contamination.

**Persistence and degradability**
According to EC criteria: Not readily biodegradable.

**Potential to bioaccumulate**
This product is expected to bioaccumulate.
Aquatic toxicity
Some short-term toxicity to aquatic and marine organisms.

13. Disposal considerations

Disposal
Dispose in a safe manner in accordance with local/national regulations.

14. Transport information

Sea Transport

- **UN Number**: 1202
- **Proper Shipping Name**: Gas Oil
- **IMO, IMDG Class**: Gas Oil
- **Group**: III
- **Symbol**: 
- **Marine pollutant**: No
- **EmS No**: 3-07

Road Transport

- **UN Number**: 1202
- **Proper Shipping Name**: Gas Oil
- **ADR /Packing group**: Gas Oil
- **Hazard indentification no**: 30
- **UAE Emergency action code enviroment**: 100 /101

MARPOL rules apply for bulk shipments by sea

15. Regulatory information

Classification/Labelling information
Contains: Gasoline (Low Boiling Point Naphtha)
This product has been classified according to the requirements of the Chemicals (Hazard Information and Packaging for supply) Regulations.

Symbol (Letter notation)+
Symbols: Flame (F+)
Indication of danger
Skull and crossbones (T)
Dead tree and fish (N)
Classification: Extremely flammable, Carcinogenic, Harmful, Irritant Dangerous for the environment

Risk Phrases
R12 Extremely flammable
R45 May cause cancer
R65 Harmful: may cause lung damage if swallowed
R38 Irritating to skin
R67 Vapours may cause drowsiness and dizziness
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

Safety Phrases
S2 Keep out of the reach of children
S23 Do not breathe vapour
S24 Avoid contact with skin  
S29 Do not empty into drains  
S43 In case of fire use foam/dry powder/AF FF/carbon dioxide -  
NEVER USE WATER  
S45 In case of accident or if you fell unwell, seek medical advice  
immediately (show the label where possible)  
S53 Avoid exposure - Obtain special instructions before use  
S61 Avoid release to the environment. Refer to special instructions  
/ safety data sheet.  
S62 If swallowed. do not induce vomiting: seek medical advice  
immediately and show this container or label

### 16. Other information

**Recommended use**  
The fuel is used for spark ignition internal combustion engines designed to run on unleaded fuels.

This safety data sheet contains important information to ensure the safe storage, handling and use of this product, it does not however constitute an assessment of workplace risks. Users are advised to refer to relevant legislation, approved codes of practice and guidance available from the Health & Safety Executive (website: http://www.ehss.ae)

All information contained in this Material Safety Data Sheet and, in particular, the health and safety and environmental information is accurate to the best of our knowledge however, the company makes no warranty or representation, express or implied, as to the accuracy or completeness of such information.

The provision of this Material Safety Data Sheet is not intended, of itself, to obviate the need for all users to satisfy themselves that the product described is suitable for their individual purposes and that the safety precautions and environmental advice are adequate for their individual purposes and situation.

Further, it is the user's obligation to use this product safely and to comply with all applicable laws and regulations concerning the use of the product.

The company accepts no responsibility for any injury, loss or damage, consequent upon any failure to follow the safety and other recommendations contained in this material safety data sheet, nor from any hazards inherent in the nature of the material, nor from any abnormal use of the material.
NFPA HAZARD DIAMOND

4. Will rapidly or completely vaporize at normal pressure and temperature, or is readily dispersed in air and will burn readily.

3. Liquids and solids that can be ignited under almost all ambient conditions.

2. Must be moderately heated or exposed to relatively high temperature before ignition can occur.

1. Must be preheated before ignition can occur.

0. Materials that will not burn.

4. Very short exposure could cause death or serious residual injury even though prompt medical attention was given.

3. Short exposure could cause serious temporary or residual injury even though prompt medical attention was given.

2. Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given.

1. Exposure could cause irritation but only minor residual injury even if no treatment is given.

0. Exposure under fire conditions would offer no hazard beyond that of ordinary combustible materials.

4. Readily capable of detonation or of explosive decomposition or reaction at normal temperatures and pressures.

3. Capable of detonation or explosive reaction, but requires a strong initiating source or must be heated under confinement before ignition, or reacts explosively with water.

2. Normally unstable and readily undergo violent decomposition but do not detonate. Also: may react violently with water or may form potentially explosive mixtures with water.

1. Normally stable, but can become unstable at elevated temperatures and pressures or may react with water with some release of energy, but not violently.

0. Normally stable, even under fire exposure conditions, and are not reactive with water.
Unusual reactivity with water. This indicates a potential hazard using water to fight a fire involving this material.

This indicates that the material is an acid, a corrosive material that has a pH lower than 7.0.

This denotes an alkaline material, also called a base. These caustic materials have a pH greater than 7.0.

This denotes a material that is corrosive (it could be either an acid or a base).

The skull and crossbones is used to denote a poison or highly toxic material.

The international symbol for radioactivity is used to denote radioactive hazards; radioactive materials are extremely hazardous when inhaled.