

MSDS – Material Safety Data Sheet – GAS OIL/DIESEL

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION

Trade name: **GAS OIL - DIESEL**

Product code: **MGO - MDO**

Suppliers name and address:

**Monjasa A/S
Strevelinsvej 4
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Denmark**

Routine inquiries:

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2. COMPOSITION/INFORMATION ON INGREDIENTS

components	cas no.	range in %
A complex mixture of hydrocarbons produced by crude oil distillation predominantly C-9 to C-20 and boiling range 160-400 deg. C. Hydro treated or desulfurized product also contains distillate from catalytic cracking. The latter contains bicyclic and tricyclic aromatic hydrocarbons.	68334305	100

3. HAZARD IDENTIFICATION

EMERGENCY OVERVIEW:

**WARNING STATEMENT:
AVOID PROLONGED AND REPEATED SKIN CONTACT. IF SKIN CONTACT OCCURS, WASH EXPOSED AREA WITH SOAP AND WATER.**

LAUNDER CONTAMINATED CLOTHING

FLAMMABLE

**MAY BE HARMFUL IF SWALLOWED, INHALED OR ABSORBED THROUGH SKIN. LOW VISCOSITY PETROLEUM MIXTURE CAN CAUSE LUNG INJURY IF INGESTED AND ASPIRATED.
CAUSES EYE AND SKIN IRRITATION.**

USE ONLY AS A FUEL.

HEALTH EFFECTS

SKIN:

Repeated or prolonged contact may result in defatting, redness, itching, inflammation, cracking and possible secondary infection. May cause allergic reactions in some individuals. Absorption from prolonged or repeated skin contact may cause systemic toxicity. Skin contact may produce a sunburn-like condition through an increased sensitivity to sunlight or other light sources.

EYE:

May cause slight eye irritation, experienced as mild discomfort and seen as slight excess redness of the eye.

INHALATION:

May cause symptoms of drowsiness or narcosis from inhalation of high vapour concentration.

INGESTION:

May be irritating to mouth, throat, and stomach. Symptoms may include pain, nausea, vomiting, and diarrhea. Because of its low viscosity, this material can directly enter the lungs, if swallowed, or if subsequently vomited. Once in the lungs it is very difficult to remove and can cause severe injury or death. Symptoms may include pain, nausea, vomiting and diarrhea.

LONG TERM TOXIC EFFECTS:

Suspect cancer hazard. Contains a component(s) that may cause cancer. Risk of cancer depends on duration and level of exposure.
Toxic gas hazard.
See section 11 for additional information.

4. FIRST AID

SKIN CONTACT:

Wash skin thoroughly with plenty of water, using soap if available. Remove contaminated clothing. In case of burns through contact with hot product, cool with plenty of running water. Get medical attention.

EYE CONTACT:

Rinse immediately with plenty of water until irritation subsides, or at least 15 min. Hold eyelids apart while flushing to rinse entire surface of eye and lids with water. Splashes of hot product should be immediately flushed with clean water until irritation subsides. Get immediate medical attention.

INHALATION:

In emergency situations use proper respiratory protection to immediately remove the affected victim from exposure. If not breathing, ensure clear airway. Remove to fresh air. Administer artificial respiration if breathing has stopped. If breathing is difficult, qualified medical personnel may administer oxygen. Keep at rest. Call for prompt medical attention.

INGESTION:

If swallowed, DO NOT induce vomiting. Aspiration of the material can cause serious lung injury such as chemical pneumonia. Call a doctor immediately. If spontaneous vomiting occurs, keep head below hips to prevent aspiration and monitor for breathing difficulty. Never give anything by mouth to an unconscious person.

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ADVICE TO DOCTOR:

This product may present an aspiration hazard. See related comments in this MSDS. If spontaneous vomiting has occurred after ingestion, the patient should be monitored for difficult breathing, as adverse effects of aspiration into the lungs may be delayed up to 48 hours.

5. FIRE-FIGHTING MEASURES

Ignition temp. (degrees c): 350
Flammable limits (% by volume): Not Determinate
Flash point (degrees c): > 60 (PMCC)

FIRE EXTINGUISHING AGENTS: According to the U.S. National Fire Protection Association Guide, use water fog, foam, dry chemical foam, or carbon dioxide (CO₂) to extinguish flames. Water or foam may cause frothing. Use water to cool fire-exposed containers. If a leak or spill has not ignited, use water spray to disperse the vapours and to provide protection for persons attempting to stop the leak.

INAPPROPRIATE EXTINGUISHING MEDIA:

Straight Streams of Water

FIRE AND EXPLOSION HAZARDS:

Combustible material, low hazard. The product can form flammable mixtures or can burn only on heating above the flash point. However, in a small percentage of residual fuels, light hydrocarbon components can generate flammable headspace gases not detectable by the flash point test. If leak or spill has not ignited, ventilate area and use water spray to disperse gas or vapor and to protect personnel attempting to stop leak. Use water to flush spills away from sources of ignition.

SPECIAL FIRE-FIGHTING PROCEDURES:

Water fog or spray, to cool fire-exposed surfaces (e.g. containers) and to protect personnel, should only be used by personnel trained in fire fighting. Cut off "fuel"; depending on circumstances, either allow the fire to burn out under controlled conditions or use foam or dry chemical powder to extinguish the fire.

Respiratory and eye protection required for fire fighting personnel exposed to fumes or smoke

EXPLOSION HAZARDS:

Full body flame-resistant clothing and/or turn-out gear recommended for persons attempting leak or spill control for fire fighting.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS:

See Section 8.

NOTIFICATION PROCEDURES:

In the event of a spill or accidental release, notify immediately relevant authorities in accordance with all applicable regulations. Eliminate all ignition sources including internal combustion engines and power tools. Ventilate area. Keep people away. Stay upwind and warn of possible downwind

explosion hazard. Avoid breathing vapours and eye or skin contact. Use respirator and protective clothing as discussed in this MSDS (see section 8). Use supplied-air respirator for large releases in confined area. Contain spill if possible. Remove with inert absorbent and place in container for disposal at an approved facility. Prevent entry into sewers and waterways.

STOP LEAK IF YOU CAN DO IT WITHOUT RISK

7. HANDLING AND STORAGE

HANDLING:

Avoid contact with skin. Use proper bonding and/or grounding procedures. Prevent small spills and leakage to avoid slip hazard. Material can accumulate static charges which may cause an electrical spark (ignition source).

STORAGE:

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 grounded and bonded. Drums must be grounded and bonded and equipped with self-closing valves, pressure vacuum bungs and flame arresters.

Keep away from heat, sparks and flames. Keep containers tightly closed. Handle and store in well-ventilated area and in accordance with local regulations regarding flammable liquids.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

ENGINEERING CONTROLS:

Ventilation and other forms of engineering controls are often the preferred means for controlling chemical exposure.

EYE/FACE PROTECTION:

Avoid eye contact. The wearing of chemicals safety goggles or face shield is recommended.

SKIN PROTECTION:

Avoid contact with skin or clothing. Skin contact can be minimized by wearing impervious protective clothing including gloves. Protective clothing made from neoprene, nitrile, or n-butyl rubber is suitable in these applications.

Exposed employees should exercise reasonable personal cleanliness; this includes cleansing exposed skin several times daily with soap and water, and laundering or dry cleaning soiled work clothing at least weekly.

INHALATION

If operating conditions create airborne concentrations that are excessive and may exceed the exposure standard(s), the use of an approved respirator is recommended.

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:

No special requirements under ordinary conditions of use and

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with adequate ventilation.

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/vapor warning properties are poor, or if air purifying filter capacity/rating may be exceeded.

PERSONAL PROTECTION:

In open systems where contact is likely, wear safety goggles, chemical-resistant overalls, and chemically impervious gloves.

Where only incidental contact is likely, wear safety glasses with side shields. No other special precautions are necessary provided skin/eye contact is avoided.

9. PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT:	160 - 400 C
FLASH POINT	> 60 deg C
FLAMMABILITY	350 deg C
VAPOUR PRESSURE:	Negligible
VAPOUR DENSITY AT 1 BAR (Air=1):	Heavier than air
DENSITY:	g/ml: at 15 deg. C range 0.81- 0.89
AUTO-IGNITION	Not determinate
VISCOSITY:	mm ² /S: 1,4-14 at 40 deg. C
POUR POINT:	< 6 C
BENZENE	Not determinate
HYDROGEN SULPHIDE	Not determinate
SULPHUR	0,05% - 2,0%
APPEARANCE:	Light amber – Dark amber
ODUOR:	Petrol diesel

10. STABILITY AND REACTIVITY

STABILITY:

Material is stable under normal conditions.

CONDITIONS TO AVOID:

Avoid contact with strong oxidizers.

INCOMPATIBLE MATERIALS:

May react with strong acids or strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.

HAZARDOUS DECOMPOSITION PRODUCTS:

Hydrogen sulphide (Elevated temperatures)

HAZARDOUS POLYMERIZATION:

Will not occur.

11. TOXICOLOGICAL INFORMATION

GENERAL:

Contains middle distillates. Middle distillates have caused skin cancer in laboratory animals following lifetime application to the skin. Brief or intermittent skin contact is not expected to

cause adverse effects if it is washed thoroughly. Avoid prolonged or repeated skin contact or breathing of vapour or mist.

U.S. NIOSH has recommended whole diesel exhaust be regarded as a potential occupational carcinogenic response in laboratory animals exposed to whole diesel exhaust. The excess risk has not been estimated. Avoid exposure to diesel exhaust. Note: exhaust from fuel oils and gas oils may present similar exposure potential and should also be avoided.

12. ECOLOGICAL INFORMATION

In the absence of specific environmental data for this product, this assessment is based on information for general hydrocarbon components found in residual fuels. Residual fuels, immediately following a release into the environment, will remain largely on the soil surface, and in water, will distribute largely between the water and sediment surfaces. Based on chemical/physical information from the literature for selected components in this product, harmful effects to terrestrial and aquatic habitats could occur. This product is expected to be resistant to biodegradation and to persist in the environment.

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL:

Place contaminated materials in disposable containers and dispose of in a manner consistent with applicable regulations. Contact local environmental or health authorities for approved disposal of this material.

REMARKS:

Releases of this product should be prevented from contaminating soil, and from entering drainage, sewer systems, and all bodies of water.

14. TRANSPORT INFORMATION

UN NUMBER:	1202
PROPER SHIPPING NAME:	Gas oil or Diesel Fuel or Heating Oil Light

ADDITIONAL INFORMATION:

Transport in accordance with local regulations regarding flammable liquids.

15. REGULATORY INFORMATION

For current health and safety information on marine fuels, contact any Sales representative in the country where the bunker purchase took place.

16. OTHER INFORMATION

SOURCE OF KEY DATA:

The recommendations presented in this Material Safety Data Sheet were compiled from actual test data (when available), comparison with similar products, component information from suppliers and from recognised codes of good practice.

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-----NOTE-----

The information and recommendations contained herein are, to the best of knowledge and belief, accurate and reliable as of the date issued, but are offered without guarantee or warranty. They relate to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Conditions of use of the material are under the control of the user; therefore, it is the user's responsibility to satisfy himself as to the suitability and completeness of such information for his own particular use.

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