

MATERIAL SAFETY DATA SHEET

DIESEL (GAS OIL)

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name	: DIESEL (GAS OIL)
Synonyms	: Gas oil, MGO
Product Use Description	: Fuel mostly for auxiliary engines
Company	: Oceanbat S.A. Av. Fco. de Orellana y Miguel H. Alcivar, Edificio Las Cámaras, 4to. Piso oficina 405 Guayaquil - Ecuador
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SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

Regulatory status	: This material is considered hazardous by the Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (29 CFR 1910.1200).
Signal Word	: WARNING
Hazard Summary	: Combustible Liquid Slight to moderate irritant. Affects central nervous system. Skin cancer hazard. Hot liquid may cause thermal burns

Potential Health Effects

Eyes	: May cause irritation, experienced as mild discomfort and seen as slight excess redness of the eye.
Skin	: May cause skin irritation and blockage of the sebaceous glands resulting in allergies and acne mainly in the hands and fingers.
Ingestion	: Ingestion may cause gastrointestinal disturbances, including irritation, nausea, vomiting and diarrhea and in severe cases other central nervous system effects may result in coma and death. Aspiration may result in severe lung damage.
Inhalation	: Vapors or mist may cause irritation of the nose and throat, respiratory tract, euphoria, cardiac arrhythmia, increased respiration, cyanosis, pulmonary edema, respiratory arrest, kidney damage, central nervous system toxicity as a result of inhaling smoke and fumes.
Carcinogenicity	: IARC lists of occupational exposure in petroleum refining as group 2A (probable carcinogenic to humans (Group 2A) and light distillate group 3 (not carcinogenic to humans). ACGIH listed as TLV-A3 (carcinogenic animal) . NTP and OSHA not list diesel as carcinogenic.

Target Organs : Skin, eyes, central nervous system and respiratory tract.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

COMPOSITION / INFORMATION ON INGREDIENTS		
Hazardous Components	%	CAS No.
Diesel	100	68334-30-5

Hazard classification NFPA:		
Health: 0	Flammability: 2	Reactivity: 0

SECTION 4. FIRST AID MEASURES

- Inhalation** : Move to fresh air. Give oxygen. If breathing is irregular or stopped, administer artificial respiration. Seek medical attention immediately.
- Skin contact** : Take off all contaminated clothing immediately. Wash off immediately with soap and plenty of water. Wash contaminated clothing before re-use. If skin irritation persists, call a physician.
- Eye contact** : Remove contact lenses. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If eye irritation persists, consult a specialist.
- Ingestion** : Do NOT induce vomiting. Do not give liquids. Seek medical attention immediately. If vomiting does occur naturally, keep head below the hips to reduce the risks of aspiration. Monitor for breathing difficulties. Small amounts of material which enter the mouth should be rinsed out until the taste is dissipated.
- Notes to physician** : Gastric lavage is contraindicated because of danger of aspiration. Consider the administration of coal or milk.

SECTION 5. FIRE-FIGHTING MEASURES

- Flash point** : 52 °C minimum
- Lower Explosive Limit** : LEL : 1,3 %v/v
- Upper Explosive Limit** : UEL: 7,5 % v/v
- Suitable extinguishing media** : Dry chemical, CO₂, water spray, fire fighting foam, fog. Water may be ineffective for extinguishment, unless used under favorable conditions by experienced FIRE fighter. Water spray is recommended to cool or protect exposed materials or structures.

Specific hazards during fire fighting

- : Isolate area around container involved in fire. Cool tanks, shells, and containers exposed to fire and excessive heat with water. For massive fires the use of unmanned hose holders or monitor nozzles may be advantageous to further minimize personnel exposure. Major fires may require withdrawal, allowing the tank to burn. Large storage tank fires typically require specially trained personnel and equipment to extinguish the fire, often including the need for properly applied fire fighting foam.

Special protective equipment for fire-fighters

- : Firefighting activities that may result in potential exposure to high heat, smoke or toxic by-products of combustion should require NIOSH/MSHA- approved pressure-demand self-contained breathing apparatus with full facepiece and full protective clothing.

Further information

- : Toxic by products of combustion, carbon oxide and sulphur could be produce.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions

- : Evacuate nonessential personnel and remove or secure all ignition sources. Consider wind direction; stay upwind and uphill, if possible. Evaluate the direction of product travel, diking, sewers, etc. to contain spill areas.

Environmental precautions

- : Carefully contain and stop the source of the spill, if safe to do so. Protect bodies of water by diking, absorbents, or absorbent boom, if possible. Do not flush down sewer or drainage systems, unless system is designed and permitted to handle such material.

Methods for cleaning up

- : Take up with sand or oil absorbing materials. Carefully vacuum, shovel, scoop or sweep up into a waste container for reclamation or disposal.

SECTION 7. HANDLING AND STORAGE

Handling

- : Keep away from fire, sparks and heated surfaces. No smoking near areas where material is stored or handled. The product should only be stored and handled in areas with intrinsically safe electrical classification.

Storage

- : Keep away from flame, sparks, excessive temperatures and open flame. Use approved containers. Keep containers closed and clearly labeled. Empty or partially full product containers or vessels may contain explosive vapors. Do not pressurize, cut, heat, weld or expose containers to sources of ignition. Store in a well-ventilated area. The storage area should comply with NFPA 30 "Flammable and Combustible Liquid Code". The cleaning of tanks previously containing this product should follow API Recommended Practice (RP) 2013 "Cleaning Mobile Tanks In Flammable and Combustible Liquid Service" and API RP 2015 "Cleaning Petroleum Storage Tanks".

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

- Engineering measures** : Use adequate ventilation to keep gas and vapor concentrations of this product below occupational exposure and flammability limits, particularly in confined spaces.
Local extraction systems are preferred to avoid the dispersion of the contaminants in the working areas.
- Eye protection** : Safety glasses or goggles are recommended where there is a possibility of splashing or spraying.
- Skin and body protection** : Use appropriate clothing including suits, gloves, boots and face mask to provide for prolonged or repeated contact with skin.
- Work / Hygiene practices** : Emergency eye wash capability should be available in the near proximity to operations presenting a potential splash exposure. Use good personal hygiene practices. Avoid repeated and/or prolonged skin exposure. Wash hands before eating, drinking, smoking, or using toilet facilities. Do not use as a cleaning solvent on the skin. Do not use solvents or harsh abrasive skin cleaners for washing this product from exposed skin areas. Waterless hand cleaners are effective.
Promptly remove contaminated clothing and launder before reuse. Use care when laundering to prevent the formation of flammable vapors which could ignite via washer or dryer. Consider the need to discard contaminated leather shoes and gloves.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

ODOR AND APPEARANCE	Clear, yellowish viscous liquid with slightly kerosene odor
SPECIFIC GRAVITY	0,84. @ 15° C
SOLUBILITY IN WATER	Negligible
MELTING POINT	-34 °C
BOILING RANGE	150- 370 ° C
AGGREGATE STATE @ 25°C Y 1 ATM.	-----

SECTION 10. STABILITY AND REACTIVITY

- Conditions to avoid** : Avoid high temperatures, open flames, sparks, welding, smoking and other ignition sources. Keep away from strong oxidizers.
- Materials to avoid** : React strongly in fluor presence. The product is incompatible with strong oxidizers, halogens, strong acids, alkaline substances.
- Hazardous decomposition products** : Oxidative Thermal decomposition can produce toxic combustion products (eg., oxides of carbon, sulfur and other hydrocarbons).
- Thermal decomposition** : No decomposition if stored and applied as directed.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute dermal (DL₅₀)	7500 mg/kg (rats, oral)
	>5ml /kg (rats, skin)
INHALATION LETHAL DOSIS MEDIA (CL₅₀)	Rats: 2g/m ³ /6 hr/3 weeks. Change in erythrocytes count, y focal fibrosis and other changes in lung, chest and breathing

SECTION 12. ECOLOGICAL INFORMATION

Additional ecological information

- : Young shad fish in salt water: 204 mg / L/24hr. , Wild ducks, LD50 = 20 mg / kg
- You can evaporate the water forming on the surface suspended sediments.
- Degradation can occur in soil and water.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal

- : This product contains hazardous ingredients listed in Section 2. Collect and dispose of it at an authorized disposal facility, in conformance with national and local regulations, and in accordance with directives on hazardous waste.

SECTION 14. TRANSPORT INFORMATION

Transport data according DOT (49CFR 172.101)
 Proper Shipping Name: diesel fuel
 Hazard Class : 3
 N° ID : UN 1202
 Packing Group: III
 Shipping Label: Flammable liquid

SECTION 15. REGULATORY INFORMATION

EPA regulations:
 Classified as Dangerous Product RCRA(40 CFR 261.21) : prone to ignition
 Dangerous Number of Residue RCRA : D001
 Listed as Dangerous Product CERCLA (40CFR 302.4) : prone to ignition
 RCRA Sec. 301
 Toxic substance SARA (40 CFR 372.65. not listed)
 OSHA regulations:
 Listed as air contaminant (29CFR 1910.1000) ; as Oil distillate.

SECTION 16. OTHER INFORMATION

Further information

The company recommends that all exposures to this product be minimized by strictly adhering to recommend occupational control procedures to avoid any potential adverse health effects.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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