

SCSD.
BUSINESS
OFFICE

000997



MATERIAL SAFETY DATA SHEET: BPNAF.2

SECTION I - MATERIAL IDENTIFICATION

PRODUCT NAME:

Marine Diesel Oil (MDO)

SUPPLIER:

BP North America Petroleum Inc.
Three Westlake Park
550 Westlake Park Blvd., Suite 1800
Houston, Texas 77079
Tel: (713) 558-3443

EMERGENCY PHONE NUMBER:

(800) 231-7817

CHEMICAL NAME AND SYNONYMS:

Mixture of middle distillate hydrocarbons, with up to 15 percent volume residual fractions added.

CAS REGISTRY NUMBER:

68476-34-6*/68476-33-5*

DOT HAZARD CLASSIFICATION:

Combustible Liquid

DOT HAZARD MATERIALS SHIPPING NAME:

Fuel Oil, Diesel, #2

LABEL REQUIRED:

None

IDENTIFICATION NUMBER:

NA 1993 or Fuel Oil

DESCRIPTION: A mixture of middle distillate paraffinic, naphthenic and aromatic hydrocarbons, mixed with up to 15 percent of residual fractions from petroleum distillation.

SECTION II - HAZARDOUS INGREDIENTS

Complex mixture of petroleum hydrocarbons boiling between 355 deg F/180 deg C and 840 deg F/450 deg C, 100 percent.

SECTION III - HEALTH INFORMATION

The petroleum hydrocarbons in this product are a mixture of paraffinic, naphthenic and aromatic hydrocarbons. The aromatics contain polycyclic compounds of various concentrations. Some of these compounds may be those which have been shown to induce cancer in animals under laboratory conditions. In humans, extreme cases of poor personal hygiene and prolonged and repeated contact with some diesel oils may eventually cause cancer. Inhalation of mists from diesel oils containing certain polycyclic aromatics may also present a cancer hazard.

Exposure to vapors or mist from diesel oils may irritate eyes, nose and throat, and at high concentrations cause headache, nausea, dizziness and pulmonary irritation. Prolonged or repeated skin contact may cause skin irritation, dermatitis or other skin disorders. Aspiration of liquid into lungs may cause pneumonitis, the effects of which may be delayed.

SECTION IV - PHYSICAL DATA

BOILING RANGE: (deg F/C)

Between 355/180 and 840/450
(approx.)

VAPOR PRESSURE AT 68 deg F/20 deg C: (mmHg) Negligible to 1

DENSITY AT 68 deg F/20 deg C: (kg/liter) 0.865 - 0.897

POUR POINT: (deg F/C)

Not above 43/6

VAPOR DENSITY: (Air = 1)

Heavier

EVAPORATION RATE: (Water = 1)

Slower

PERCENT VOLATILE AT 100 deg F/38 deg C: Negligible

SOLUBILITY IN WATER:

Negligible

APPEARANCE AND ODOR:

Dark straw to dark brown liquid.
Characteristic petroleum odor.*****
SECTION V - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: (FMCC method) (deg F/C)

Above 140/60

AUTO IGNITION TEMPERATURE: (deg F/C)

Above 660/350

FLAMMABLE LIMITS:

Lower: Not determined
Upper: Not determinedELECTRICAL CONDUCTIVITY:
(pS/m - ASTM D2624)

10 - 100

FIRE AND EXPLOSION HAZARDS: Combustible liquid. If heated above flash point, this material will release flammable vapors which, if exposed to source of ignition, can burn or be explosive in confined spaces. Mists or spray may be flammable at temperatures below flash point. Keep away from heat or open flame.

MSDS: Marine Diesel Oil (MDO)

- 4 -

SECTION VII - REACTIVITY DATA

STABILITY:

Stable under normal conditions. Not chemically reactive.

CONDITIONS TO AVOID:

Extreme heat and open flame.

MATERIALS TO AVOID:

Strong oxidizers, alkalis or acids.

HAZARDOUS DECOMPOSITION OF PRODUCT:

Burning or excessive heating may produce CO, H₂S or other harmful gasses or vapors including oxides of S, N, metals and other elements.

HAZARDOUS POLYMERIZATION:

Will not occur.

SECTION VIII - ENVIRONMENTAL HAZARDS

This product is an "oil" under the Clean Water Act. Keep out of surface waters or any water courses or sewers leading to surface waters. Keep from entering ground waters.

SECTION IX - SPILL, LEAK OR DISPOSAL PROCEDURES

Stop flow of product. Contain spill. Remove all sources of ignition. Evacuate all non-essential personnel. Clean up as soon as possible using proper protective equipment, booms, sorbents and containers. Notify local, state or federal agencies if required by law and comply with all applicable laws. Notify National Response Center if spill enters or threatens to enter surface waters. - (800) 424-8802.

Maximize product recovery for reuse or recycling. Conditions of use may cause material to become state or federal "Hazardous Waste" as defined by applicable laws. Use only approved transporters, treatment and disposal sites.

SECTION X - SPECIAL PROTECTIVE EQUIPMENT

CLOTHING: Wear long sleeved clothing, gloves and other garments to limit skin contact. If splashing cannot be avoided, wear face and eye protection. Consider use of barrier creams if appropriate.

RESPIRATORY: Use only NIOSH approved respirator for organic mists to prevent overexposure in conditions where oil mist or vapors exceed occupational exposure limits. Use self contained breathing apparatus in emergencies where intense vapors, fumes, smoke, etc. is present.

Date of Preparation: November 18, 1985