1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: DIESEL #2, OFF ROAD (LOW SULFUR)
SUPPLIER: EXXONMOBIL OIL CORPORATION
3225 GALLOWAY RD.
FAIRFAX, VA 22037
24 - Hour Health and Safety Emergency (call collect): 609-737-4411
24 - Hour Transportation Emergency (Primary) CHEMTREC: 800-424-9300
(Secondary) 281-834-3296
Product and Technical Information: 800-662-4525 703-846-6693
MSDS Fax on Demand: 613-228-1467, other MSDS information: 856-224-4644

2. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAMES AND SYNONYMS: HYDROCARBONS AND ADDITIVES

GLOBALLY REPORTABLE MSDS INGREDIENTS:

<table>
<thead>
<tr>
<th>Substance Name</th>
<th>Approx. W%</th>
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<tbody>
<tr>
<td>DIESEL FUEL (68334-30-5)</td>
<td>95-100</td>
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COMPONENT(S) OF PRODUCT INGREDIENTS INCLUDE:

<p>| |</p>
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<tbody>
<tr>
<td>ETHYL BENZENE (100-41-4)</td>
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</table>

NOTE: Composition may contain up to 0.5% performance additive. See Section 8 for exposure limits (if applicable).

3. HAZARDS IDENTIFICATION

This product is considered hazardous according to regulatory guidelines (See Section 15).

EMERGENCY OVERVIEW: Red Liquid. Material is combustible. Liquid can release vapors that readily form flammable mixtures at or above the flash point. Product can accumulate a static charge which may cause a fire or explosion. DOT ERG No.: 128

POTENTIAL HEALTH EFFECTS: Respiratory irritation, dizziness, nausea, loss of consciousness, and in cases of extreme exposure, possibly death. Diesel exhaust may cause lung cancer. Prolonged, repeated skin contact may result in skin irritation or more serious skin disorders. Low viscosity material - if swallowed may enter the lungs and cause lung damage. Note: This product contains polycyclic aromatic hydrocarbons, some of which have been reported to cause skin cancer in test animals and in humans under conditions of poor personal hygiene and prolonged repeated contact.

For further health effects/toxicological data, see Section 11.

4. FIRST AID MEASURES

EYE CONTACT: Flush thoroughly with water. If irritation occurs, call a physician.

SKIN CONTACT: Remove contaminated clothing. Dry wipe exposed skin and cleanse yourself with waterless hand cleaner and follow by washing thoroughly with soap and water. For those providing assistance, avoid further contact to yourself or others. Wear impervious gloves. Launder contaminated clothing separately before reuse. Discard contaminated articles that cannot be laundered. (See Section 16 - Injection Injury)

INHALATION: Remove from further exposure. If respiratory irritation, dizziness, nausea, or unconsciousness occurs, seek immediate medical assistance. If breathing has stopped, assist ventilation with mechanical device or use mouth-to-mouth resuscitation.
INGESTION: Seek immediate medical attention. Do not induce vomiting.

NOTE TO PHYSICIANS: Material if aspirated into the lungs may cause chemical pneumonitis. PRE-EXISTING MEDICAL CONDITIONS WHICH MAY BE AGGRAVATED BY EXPOSURE: Hydrocarbon Solvents/Petroleum hydrocarbons- Skin contact may aggravate an existing dermatitis.

5. FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA: Carbon dioxide, foam, dry chemical and water fog. SPECIAL FIRE FIGHTING PROCEDURES: Water may be ineffective, but water should be used to keep fire-exposed containers cool. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply.

SPECIAL PROTECTIVE EQUIPMENT: For fires in enclosed areas, fire fighters must use self-contained breathing apparatus.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Material is combustible. Liquid can release vapors that readily form flammable mixtures at or above the flash point. Product can accumulate a static charge which may cause a fire or explosion.

COMBUSTION PRODUCTS: Fumes, smoke, carbon monoxide, sulfur oxides, aldehydes and other decomposition products, in the case of incomplete combustion.

Flash Point C(°F): > 55 (131) (ASTM D-93).

Flammable Limits (approx. % vol in air) - LEL: 0.6%, UEL: 7.0%

NFPA HAZARD ID: Health: 1, Flammability: 2, Reactivity: 0

6. ACCIDENTAL RELEASE MEASURES

NOTIFICATION PROCEDURES: Report spills/releases as required to appropriate authorities. U.S. Coast Guard and EPA regulations require immediate reporting of spills/releases that could reach any waterway including intermittent dry creeks. Report spill/release to Coast Guard National Response Center toll free number (800) 424-8802. In case of accident or road spill notify CHEMTREC (800) 424-9300.

PROCEDURES IF MATERIAL IS RELEASED OR SPILLED:

LAND SPILL: Eliminate sources of ignition. Shut off source taking normal safety precautions. Take measures to minimize the effects on ground water. Recover by pumping using explosion-proof equipment or contain spilled liquid with sand or other suitable absorbent and remove mechanically into containers. If necessary, dispose of adsorbed residues as directed in Section 13.

WATER SPILL: Eliminate sources of ignition and warn other ships in the vicinity to stay clear. Notify port and other relevant authorities. Confining with booms if skimming equipment is available to recover the spill. Otherwise disperse in unconfined waters, if permitted by local authorities and environmental agencies. If permitted by regulatory authorities the use of suitable dispersants should be considered where recommended in local oil spill procedures.

ENVIRONMENTAL PRECAUTIONS: Prevent material from entering sewers, water sources or low lying areas; advise the relevant authorities if it has, or if it contaminates soil/vegetation.

PERSONAL PRECAUTIONS: See Section 8

7. HANDLING AND STORAGE

HANDLING: Keep product away from high energy ignition sources, heat, sparks, pilot lights, static electricity, and open flame. Harmful in contact with or if absorbed through the skin. Avoid inhalation of vapors or mists. Use in well ventilated area away from ignition sources. See Section 8 for additional personal protection when handling this product. PORTABLE CONTAINERS approved for storing fuel must be placed on the ground and the nozzle must stay in contact with the container when filling to prevent build up and discharge of static electricity.

STORAGE: Store in a cool area. Avoid sparking conditions. Ground and bond all transfer equipment.

SPECIAL PRECAUTIONS: To prevent and minimize fire or explosion risk
from static accumulation and discharge, effectively bond and/or ground product transfer system. Do not use electronic devices (including but not limited to cellular phones, computers, calculators, pagers, etc.) in or around any fueling 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. Electrical equipment and fittings must comply with local fire prevention regulations for this class of product. Use the correct grounding procedures. Refer to national or local regulations covering safety at petroleum handling and storage areas for this product.

EMPTY CONTAINER WARNING: Empty containers retain residue (liquid and/or vapor) and can be dangerous. DO NOT PRESSURIZE, 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. Do not attempt to refill or clean container since residue is difficult to remove. Empty drums should be completely drained, properly bunged and promptly returned to a drum reconditioner. All containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

OCCUPATIONAL EXPOSURE LIMITS: ExxonMobil recommends an 8-hour time-weighted average (TWA) exposure of 500 mg/m³ total vapor/aerosol (approx. 100 ppm vapor) or 5 mg/m³ stable aerosols.

--- TWA --- STEL --- NOTE

Substance Name (CAS-No.) Source ppm mg/m³ ppm mg/m³
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ETHYL BENZENE (100-41-4) OSHA 100 435 125 545
ACGIH 100 434 125 543

NOTE: Limits shown for guidance only. Follow applicable regulations.

VENTILATION: Use in well ventilated area with local exhaust ventilation. Ventilation equipment must be explosion proof. Use away from all ignition sources.

RESPIRATORY PROTECTION: Approved respiratory equipment must be used when airborne concentrations are unknown or exceed the recommended exposure limit. Self-contained breathing apparatus may be required for use in confined or enclosed spaces.

EYE PROTECTION: If splash with liquid is possible, chemical type goggles should be worn.

SKIN PROTECTION: Impervious gloves must be worn. If contact is likely oil impervious clothing must be worn. Good personal hygiene practices should always be followed.

9. PHYSICAL AND CHEMICAL PROPERTIES

Typical physical properties are given below. Consult Product Data Sheet for specific details.

APPEARANCE: Liquid
COLOR: Red
ODOR: Hydrocarbon
ODOR THRESHOLD—ppm NE
pH: NA
BOILING POINT °C (°F): > 149 (300)
MELTING POINT °C (°F): NA
FLASH POINT °C (°F): > 55 (131) (ASTM D-93)
FLAMMABILITY (solids): NE
AUTO FLAMMABILITY: NE
EXPLOSIVE PROPERTIES: NA
OXIDIZING PROPERTIES: NA
VAPOR PRESSURE—mm/Hg 20 °C: 0.5
VAPOR DENSITY: > 2.0
EVAPORATION RATE: NE
RELATIVE DENSITY 15/4 °C: 0.82–0.87
SOLUBILITY IN WATER: Negligible
PARTITION COEFFICIENT: > 3.5
Viscosity at 40°C, cSt: > 1.0
Viscosity at 100°C, cSt: NE
Pour Point (C/F): < -7(20)
Freezing Point (C/F): NE
Volatile Organic Compound: NE
DMSO Extract, IP-346 (wt. %): NA
NA = NOT APPLICABLE
NE = NOT ESTABLISHED
D = DECOMPOSES

For further technical information, contact your marketing representative.

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10. STABILITY AND REACTIVITY
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Stability (thermal, light, etc.): Stable.
Conditions to Avoid: Extreme heat and high energy sources of ignition.
Incompatibility (Materials to Avoid): Halogens, strong acids, alkalies, and oxidizers.
Hazardous Decomposition Products: Product does not decompose at ambient temperatures.
Hazardous Polymerization: Will not occur.
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11. TOXICOLOGICAL DATA
--- ACUTE TOXICOLOGY ---
Oral Toxicity (Rats): Practically non-toxic (LD50: greater than 2000 mg/kg). Based on testing of similar products and/or the components.
Dermal Toxicity (Rabbits): Practically non-toxic (LD50: greater than 2000 mg/kg). Based on testing of similar products and/or the components.
Inhalation Toxicity (Rats): Practically non-toxic (LC50: greater than 5 mg/l). Based on testing of similar products and/or the components.
Eye Irritation (Rabbits): Practically non-irritating. (Draize score: greater than 6 but 15 or less). Based on testing of similar products and/or the components.
Skin Irritation (Rabbits): Practically non-irritating. (Primary Irritation Index: greater than 0.5 but less than 3). Based on testing of similar products and/or the components.
--- SUBCHRONIC TOXICOLOGY (SUMMARY) ---
Repeated dermal application of middle distillates, heating oils and diesel oils to rabbits for 2-4 weeks at up to 1 gm/kg resulted in strong to severe skin irritation with some weight loss at the higher dose. Toxic effects ranging from weight loss to mortality was observed in rabbits treated repeatedly with very high doses (6 gm/kg) of these oils. Repeated inhalation exposure of middle distillate and diesel vapor and aerosol to rats for 2-4 weeks at up to 6 mg/l resulted in respiratory tract irritation, lung changes/infiltration/accumulation, and some reduction in lung function.
--- REPRODUCTIVE TOXICOLOGY (SUMMARY) ---
Diesel fuel vapors were tested in an inhalation teratology (developmental toxicity) study in rats and when only minimal maternal toxicity was observed, no fetotoxic or developmental effects were observed. A developmental toxicity study of dermally applied middle distillates did indicate fetotoxicity (reduced litter size, litter weight, increased resorptions) at doses that also caused significant maternal toxicity.
--- CHRONIC TOXICOLOGY (SUMMARY) ---
Diesel fuel, heating oil and middle distillates have been shown to be carcinogenic in lifetime mouse skin painting bioassays. While in some cases, the tumor incidence is low in the test populations and possibly associated with skin irritation, concurrent evidence from short-term predictive tests (Modified Ames) does indicate some level of mutagenic activity associated with levels of polycyclic aromatic compounds in certain test samples.
--- SENSITIZATION (SUMMARY) ---
Middle distillate oils were not skin sensitizers when tested in a Modified Buehler Guinea Pig Sensitization Assay.
--- OTHER TOXICOLOGY DATA ---
Overexposure to diesel exhaust fumes may result in eye irritation, headaches, nausea, and respiratory irritation. Animal studies involving lifetime exposure to high levels of diesel exhaust have
produced variable results, with some studies indicating a potential for lung cancer. Limited evidence from epidemiological studies suggest an association between long-term occupational exposure to diesel engine emissions and lung cancer. Diesel engine exhaust typically consists of gases and particulates, including carbon dioxide, carbon monoxide, nitrogen compounds, oxides of sulfur, and hydrocarbons. Diesel exhaust composition will vary with fuel, engine type, load cycle, engine maintenance, tuning and exhaust gas treatment. Use of adequate ventilation and/or respiratory protection in the presence of diesel exhaust is recommended to minimize exposures. This product contains ethylbenzene. The International Agency for Research on Cancer (IARC) has evaluated ethylbenzene and classified it as possibly carcinogenic to humans (Group 2B) based on sufficient evidence for carcinogenicity in experimental animals, but inadequate evidence for cancer in exposed humans.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL FATE AND EFFECTS:
In the absence of specific environmental data for this product, this assessment is based on information for representative substances. When released into the environment, some of the constituents of diesel fuels/heating oil will volatilize and be photodegraded in the atmosphere. The less volatile, more water-soluble components which are aromatic hydrocarbons will also undergo aqueous photodegradation. Dissolution of the higher molecular weight hydrocarbon components in water will be limited, but losses through sediment adsorption may be significant. Based on test results for similar products, this substance may be toxic to aquatic organisms such as algae and daphnia (EL50/1L50 =1-10 mg/L). This substance has also been shown to be toxic to specific fish species (LL50 = 1-10 mg/L for rainbow trout, Atlantic silverside). The majority of the components in this product would be expected to be inherently biodegradable.

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL: Product is suitable for burning for fuel value in compliance with applicable laws and regulations.
RCRA INFORMATION: Disposal of unused product may be subject to RCRA regulations (40 CFR 261). Disposal of the used product may also be regulated due to ignitability, corrosivity, reactivity, or toxicity as determined by the Toxicity Characteristic Leaching Procedure (TCLP).
FLASH: > 55(131) C(F)

14. TRANSPORT INFORMATION

NOTE: The flash point of this material is >131°F. Regulatory classifications vary as follows:
DOT: Flammable Liquid OR Combustible Liquid - (49CFR 173.120(b)(2))
OSHA: Combustible Liquid
IATA/IMO: Flammable Liquid
USA DOT:
SHIPPING NAME: Diesel Fuel
HAZARD CLASS & DIV: COMBUSTIBLE LIQUID
ID NUMBER: NA1993
ERG NUMBER: 128
PACKING GROUP: PG III
STOC: NE
DANGEROUS WHEN WET: No
POISON: No
LABEL(s): NA
PLACARD(s): Combustible
PRODUCT RQ: NA
MARPOL III STATUS: NA
RI BY ADR: HAZARD CLASS: 3
15. REGULATORY INFORMATION

US OSHA HAZARD COMMUNICATION STANDARD: Product assessed in accordance with OSHA 29 CFR 1910.1200 and determined to be hazardous.

EU Labelling: Product is dangerous as defined by the European Union Dangerous Substances/Preparations Directives.

Symbol: Xn Harmful.
Risk Phrase(s): R40-65-66. Possible risks of irreversible effects. Harmful: may cause lung damage if swallowed. Repeated exposure may cause skin dryness or cracking.
Safety Phrase(s): S24-2-36/37-61-62. Avoid contact with skin. Keep out of the reach of children. Wear suitable protective clothing and gloves. Avoid release to the environment. Refer to special instructions/Safety data sheets. If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

Contains: Gas oil - unspecified.

Governmental Inventory Status: All components comply with TSCA, ELINCS/ELINCS, Al CS, METI, DSL, KOREA, and PHILIPPINES.

U.S. Superfund Amendments and Reauthorization Act (SARA) Title III: This product contains no "EXTREMELY HAZARDOUS SUBSTANCES".

SARA (311/312) REPORTABLE HAZARD CATEGORIES:
- FIRE
- CHRONIC
- ACUTE

This product contains the following SARA (313) Toxic Release Chemicals:

<table>
<thead>
<tr>
<th>CHEMICAL NAME</th>
<th>CAS NUMBER</th>
<th>LIST CITATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLYNUCLEAR AROMATIC HYDROCARBONS (COMPONENT ANALYSIS)</td>
<td></td>
<td>22</td>
</tr>
<tr>
<td>NAPHTHALENE (COMPONENT ANALYSIS)</td>
<td>91-20-3</td>
<td>22</td>
</tr>
</tbody>
</table>

The following product ingredients are cited on the lists below:

<table>
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<tr>
<th>CHEMICAL NAME</th>
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<tbody>
<tr>
<td>ETHYL</td>
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