### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name**  
Middle Distillate Oil

**Supplier**  
J.P. Morgan Ventures Energy Corporation  
383 Madison Avenue, 10th floor  
New York, NY 10017

**Synonyms**  
Low or High Sulfur Diesel, Low or High Sulfur No. 2 Fuel Oil, Low or High Sulfur No. 2 Heating Oil, Low or High Sulfur Heating Oil, Marine Diesel, Gas Oil, Atmospheric or Vacuum Gas Oil, Dyed or Undyed Diesel Fuel (may contain dye to meet the IRS requirements for tax-exempt diesel fuel)

**Chemical Family**  
Petroleum Hydrocarbon

**Intended Use**  
Fuel

**Emergency Numbers**  
Chemtrec: 800-424-9300  
J.P. Morgan Technical Information: 212-834-5788  
California Poison Action Line: 800-222-1222

### 2. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Hazardous Components Name/CAS No.</th>
<th>Concentration (%)</th>
<th>ACGIH Exposure Limits</th>
<th>OSHA Exposure Limits</th>
<th>NIOSH Exposure Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diesel Fuel, No. 2 68476-36-6</td>
<td>0-100</td>
<td>100 mg/m³ TWA-Skin</td>
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<td></td>
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<tr>
<td>Fuel Oil, No. 2 68476-30-2</td>
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<td>100 mg/m³ TWA-Skin</td>
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<tr>
<td>Full Straight Run Middle Distillate 68814-87-9</td>
<td>0-100</td>
<td>100 mg/m³ TWA-Skin</td>
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<td>Hydrotreated Middle Distillate 64742-46-7</td>
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<td>100 mg/m³ TWA-Skin</td>
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<td>Light Catalytic Cracked Distillate 64741-59-9</td>
<td>0-100</td>
<td>100 mg/m³ TWA-Skin</td>
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<tr>
<td>Straight Run Middle Distillate 64741-44-2</td>
<td>0-100</td>
<td>100 mg/m³ TWA-Skin</td>
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<tr>
<td>Petroleum Residues Vacuum Distillate 68955-27-1</td>
<td>0-100</td>
<td>100 mg/m³ TWA-Skin</td>
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<tr>
<td>Ethyl Benzene 100-41-4</td>
<td>&lt; 1</td>
<td>100 ppm TWA 125 ppm STEL</td>
<td>100 ppm TWA 125 ppm STEL 800 ppm IDLH</td>
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<tr>
<td>Hydrogen Sulfide 7783-06-4</td>
<td>&lt; 0.1</td>
<td>10 ppm TWA 15 ppm STEL</td>
<td>20 ppm Ceiling 50 ppm Peak</td>
<td>10 ppm Ceiling 100 ppm IDLH</td>
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<tr>
<td>Naphtalene 91-20-3</td>
<td>&lt; 2</td>
<td>10 ppm TWA 15 ppm STEL Skin</td>
<td>10 ppm TWA 15 ppm STEL Skin 250 ppm IDLH</td>
<td></td>
</tr>
</tbody>
</table>
3. HAZARDS IDENTIFICATION

Emergency Overview
This product is a clear to pale yellow liquid or red, if dyed, with a hydrocarbon odor. Hydrogen sulfide (H₂S), an extremely flammable and toxic gas, may be present. This material is a combustible liquid that can release vapors that readily form flammable mixtures at or above the flash point. Keep away from heat, sparks, flames and other sources of ignition. It contains material that has caused cancer based on animal data. Never siphon this product by mouth. If swallowed, this product may be aspirated into the lungs and cause lung damage or death.

Potential Acute Health Effects

**Inhalation**
Breathing high concentrations may be harmful. Mist or vapor can irritate the throat and lungs. Breathing this material may cause central nervous system depression with symptoms including nausea, headache, dizziness, fatigue, drowsiness or unconsciousness. This material may contain or liberate hydrogen sulfide, a poisonous gas with the smell of rotten eggs. The smell disappears rapidly because of olfactory fatigue so odor may not be a reliable indicator of exposure. Effects of overexposure include irritation of the eyes, nose, throat and respiratory tract, blurred vision, photophobia (light sensitivity) and pulmonary edema (fluid accumulation in lungs). Severe exposures can result in nausea, vomiting, muscle weakness or convulsions, respiratory failure and death. Hydrogen sulfide and other hazardous vapors may evolve and collect in the headspace of storage tanks or other enclosed vessels.

**Eye Contact**
This product can cause eye irritation from short-term contact with liquid, mists or vapors. Symptoms include stinging, watering, redness and swelling. Effects may be more serious with repeated or prolonged contact.

**Skin Contact**
Mild to moderate skin irritant. Contact may cause redness, itching, burning and skin damage. Prolonged or repeated skin contact may cause drying and cracking of the skin, dermatitis (inflammation), burns and severe skin damage.

**Ingestion**
Ingestion may result in nausea, vomiting, diarrhea and restlessness. Aspiration (inadvertent suction) of liquid into the lungs must be avoided as even small quantities in the lungs can produce lung inflammation and damage.
Potential Chronic Health Effects

Signs and Symptoms
Chronic effects of overexposure are similar to acute effects including central nervous system (CNS) effects and CNS depression, skin dermatitis and conjunctivitis.

Carcinogenic Potential
This material may contain ethyl benzene and naphthalene at concentrations above 0.1%. IARC has identified diesel engine exhaust as probably carcinogenic to humans (Group 2A) and ethyl benzene, naphthalene, and marine diesel fuel as possibly carcinogenic to humans (Group 2B) based on laboratory animal studies.

Target Organs
May cause damage to skin, kidneys, liver, upper respiratory system, eyes and central nervous system (CNS).

Conditions Aggravated by Overexposure
Disorders of the following organs or organ systems that may be aggravated by significant exposure to this material or its components include the skin, respiratory system, liver, kidneys and CNS.

4. FIRST AID MEASURES

Inhalation
Move the exposed person to fresh air. If not breathing, clear airways and give artificial respiration. If breathing is difficult, humidified oxygen should be administered by qualified personnel. Seek medical attention if breathing difficulties continue.

Eye
Flush eyes with water for at least 15 minutes. Hold eyelids apart to ensure complete irrigation of the eye. Remove contact lenses, if worn, after initial flushing. Do not use eye ointment. Seek medical attention.

Skin
Remove contaminated shoes and clothing, and flush affected areas with large amounts of water. If skin surface is damaged, apply a clean dressing and seek medical attention. If skin surface is not damaged, clean affected area thoroughly with mild soap and water. Seek medical attention if tissue appears damaged or if pain or irritation persists. Launder or discard contaminated clothing.

Ingestion
Aspiration hazard. Do not induce vomiting or give anything by mouth because the material can enter the lungs and cause severe lung damage. If spontaneous vomiting is about to occur, place victim’s head below knees. If victim is drowsy or unconscious, place on the left side with head down. Do not leave victim unattended and observe closely for adequacy of breathing. Seek medical attention.

Notes to Physician
Ingestion of this product or subsequent vomiting may result in aspiration of light hydrocarbon liquid, which may cause pneumonitis. Inhalation overexposure can produce toxic effects, monitor for respiratory distress. If cough or breathing difficulties develop, evaluate for upper respiratory tract inflammation, bronchitis and pneumonitis. Skin contact may aggravate an existing dermatitis. High pressure injection injuries may cause necrosis of underlying tissue regardless of superficial appearance.
5. FIRE FIGHTING MEASURES

Flammability Classification
OSHA Classification (29 CFR 1910.1200): Combustible Liquid
NFPA Class-II Combustible Liquid
NFPA Ratings: Health: 1, Flammability: 2, Reactivity: 0

Flammable Limits
Flash Point
52 C, 125 F Closed Cup (Pensky-Martens)

Flash Point
52 C, 125 F Closed Cup (Pensky-Martens)

Flammable Lower Limit: 0.3%
Upper Limit: 10%

Autoignition Temperature
260 C, 500 F

Combustion Products
Highly dependent on combustion conditions. Fume, smoke, carbon monoxide,
carbon dioxide, sulfur and nitrogen oxides, unburned hydrocarbons.

Fire and Explosion Hazards
This material is combustible and can be ignited by heat, sparks, flames or other
sources of ignition (e.g., static electricity, pilot lights, mechanical/electrical
equipment and electronic devices such as cell phones, computers, calculators
and pagers which have not been certified as intrinsically safe). Vapors are
heavier than air and can accumulate in low areas. May create vapor/air
explosion hazard indoors, in confined spaces, outdoors or in sewers. Vapors
may travel considerable distances to a remote source of ignition where they can
ignite, flash back or explode. Product can accumulate a static charge that may
cause a fire or explosion. A product container, if not properly cooled, can
rupture in the heat of a fire.

Extinguishing Media
Dry chemical, carbon dioxide or foam is recommended. Water spray is
recommended to cool or protect exposed materials or structures. Carbon
dioxide can displace oxygen. Use caution when applying carbon dioxide in
confined spaces. Water may be ineffective for extinguishment, unless used
under favorable conditions by experienced fire fighters.

Fire Fighting
Use water spray to cool fire-exposed containers and to protect personnel.
Isolate immediate hazard area and keep unauthorized personnel out. Water
spray may be useful in minimizing or dispersing vapors and to protect
personnel. Cool equipment exposed to fire with water. Avoid spreading
burning liquid with water used for cooling.
For fires beyond the incipient stage, emergency responders in the immediate
hazard area should wear bunker gear. When the potential chemical hazard is
unknown, in enclosed or confined spaces, or when explicitly required by
regulations, a self-contained breathing apparatus should be worn. Wear other
appropriate protective equipment as conditions warrant.
6. ACCIDENTAL RELEASE MEASURES

**Protective Measures**
Combustible Liquid. Keep all sources of ignition and hot metal surfaces away from spill/release. The use of explosion-proof electrical equipment is recommended. Stay upwind and away from spill/release. Isolate immediate hazard area and keep unauthorized personnel out. Wear appropriate protective equipment as conditions warrant per Exposure Controls/Personal Protection guidelines.

**Spill Management**
Stop the leak if it can be done without risk. Prevent spilled material from entering waterways, sewers, basements or confined areas. Contain release to prevent further contamination of soils, surface water or groundwater. Clean up spill as soon as possible using appropriate techniques such as applying non-combustible absorbent materials or pumping. All equipment used when handling the product must be grounded. A vapor suppressing foam may be used to reduce vapors. Use clean non-sparking tools to collect absorbed material. Where feasible and appropriate, remove contaminated soil. Dispose of contaminated materials in a manner consistent with applicable regulations.

**Reporting**
Report spills/releases as required, to appropriate local, state and federal authorities. US Coast Guard and Environmental Protection Agency regulations require immediate reporting of spills/release that could reach any waterway including intermittent dry creeks. Report spill/release to the National Response Center at (800) 424-8802. In case of accident or road spill, notify Chemtrec at (800) 424-9300.

7. HANDLING AND STORAGE

**Handling**
Use ONLY as a motor fuel. Do NOT siphon by mouth. Use non-sparking tools and explosion-proof equipment. Open container slowly to relieve any pressure. Bond and ground all equipment when transferring from one vessel to another. Can accumulate static charge by flow or agitation. Can be ignited by static discharge. Explosion-proof electrical equipment is recommended and may be required by fire codes. Warning! Use of this material in spaces without adequate ventilation may result in the generation of hazardous levels of combustion products and/or inadequate oxygen levels for breathing. Odor is an inadequate warning for hazardous conditions.

**Storage**
Use and store this material in cool, dry, well-ventilated areas away from heat, direct sunlight, hot metal surfaces and all sources of ignition. Post area warnings: ‘No Smoking or Open Flame’. Keep away from incompatible material. Outdoor or detached storage of portable containers is preferred. Indoor storage should meet OSHA standards and appropriate fire codes.

**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 (such as cellular phones, computers, calculators, pagers, etc.) in or around any fueling operation or storage area unless the devices are certified as intrinsically safe. Electrical equipment and fittings should comply with local fire codes.
Portable Containers should never be filled while they are in or on a motor vehicle or marine craft. Static electricity may ignite vapors when filling non-grounded containers or vehicles on trailers. To avoid static buildup, do not use a nozzle lock open device. Use only approved containers. Keep containers tightly closed. Place the container on the ground before filling. Keep the nozzle in contact with the container during filling.

Empty Container Warning

Empty containers retain liquid and vapor residues and can be dangerous. Do NOT pressurize, cut, weld, braze, solder, drill, grind or expose 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 containers since residue is difficult to remove. Empty drums should be completely drained, properly closed and returned to the supplier or a qualified drum reconditioner. All containers should be disposed of in an environmentally safe manner in accordance with government regulations.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

General Considerations

Consider the potential hazards of this material, applicable exposure limits, job activities and other substances in the work place when designing engineering controls and selecting personal protective equipment.

Engineering Controls

Use process enclosures, local exhaust ventilation or other engineering controls to maintain airborne levels below the recommended exposure limits. An emergency eye wash station and safety shower should be located near the work station.

Personal Protective Equipment

If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, personal protective equipment (PPE) is recommended. A hazard assessment of the work should be conducted by a qualified professional to determine what PPE is required.

Respiratory Protection

When airborne concentrations are expected to exceed the established exposure limits given in Section 2, use a NIOSH approved organic vapor respirator. Use a full-face positive-pressure supplied air respirator in circumstances where air-purifying respirators may not provide adequate protection. If internal combustion devices are used in an enclosed space, carbon monoxide will be present in the exhaust. If the airborne concentrations are above the occupational exposure limit for carbon monoxide, use a positive pressure air-supplying respirator.

Eye Protection

Safety glasses equipped with side shields are recommended as minimum protection in industrial settings. Chemical goggles should be worn during transfer operations or when there is a likelihood of misting, splashing or spraying of this material.

Skin and Body Protection

Avoid skin contact. Wear long-sleeved fire-retardant garments while working with flammable and combustible liquids. Additional chemical-resistant protective gear may be required if splashing or spraying conditions exist. This may include an apron, arm covers, impervious gloves, boots and additional facial protection.
9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Appearance</strong></td>
<td>Clear to Light Yellow or Red if Dyed</td>
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<tr>
<td><strong>Physical Form</strong></td>
<td>Liquid</td>
</tr>
<tr>
<td><strong>Odor</strong></td>
<td>Kerosene-like</td>
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<tr>
<td><strong>Odor Threshold</strong></td>
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<tr>
<td><strong>pH</strong></td>
<td>Neutral</td>
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<tr>
<td><strong>Vapor Pressure</strong></td>
<td>0.01 psi 100°F, 38°C</td>
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<tr>
<td><strong>Vapor Density</strong></td>
<td>&gt; 2 (air = 1)</td>
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<tr>
<td><strong>Boiling Point / Range</strong></td>
<td>300-700°F/150-370°C</td>
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<tr>
<td><strong>Percent Volatile</strong></td>
<td>840 g/l VOC</td>
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<td><strong>Partition Coefficient</strong></td>
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<tr>
<td><strong>Specific Gravity</strong></td>
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<td><strong>Molecular Weight</strong></td>
<td>170 - 200</td>
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<tr>
<td><strong>Density</strong></td>
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<tr>
<td><strong>Evaporation Rate</strong></td>
<td>Not established</td>
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<tr>
<td><strong>Flash Point</strong></td>
<td>125°F/52°C</td>
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<td><strong>Test Method</strong></td>
<td>Closed Cup (Pensky-Martens)</td>
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<tr>
<td><strong>Explosive Limits</strong></td>
<td>0.3% LEL, 10% UEL</td>
</tr>
<tr>
<td><strong>Autoignition Temperature</strong></td>
<td>500°F/260°C</td>
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<tr>
<td><strong>Solubility in Water</strong></td>
<td>Slightly soluble</td>
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</table>

10. STABILITY AND REACTIVITY

**Stability**

Stable under normal anticipated storage and handling temperatures and pressures. Combustible liquid and vapor. Vapor can cause flash fire.

**Conditions to Avoid**

Avoid all possible sources of ignition.

**Incompatibility**

Avoid contact with strong oxidizing agents such as strong acids, alkalies, chlorine and other halogens, dichromates or permanganes, which can cause fire or explosion.

**Hazardous Decompositions**

The use of hydrocarbon fuel in an area without adequate ventilation may result in hazardous levels of combustion products (e.g., oxides of carbon, sulfur and nitrogen, benzene and other hydrocarbons) and/or dangerously low oxygen levels.

**Hazardous Polymerization**

Will not occur.
11. TOXICOLOGICAL INFORMATIONS

Diesel Fuel No. 2 68476-34-6

Acute Toxicity:
Dermal LD50 = MSI = 3.37 (rabbit)
LC50 = No information available
Oral LD50 = 14.5 ml/kg (rat)

Target Organs: Dermal application of a fuel oil blendstock to rats, 5 days a week, for 13 weeks resulted in limited evidence of liver damage (i.e., increased liver weight and changes in hepatic serum enzyme activity).

Carcinogenicity: Petroleum middle distillates, a class of hydrocarbons distilled from crude oil at approximately 350-750°F, have been shown to cause skin tumors in mice following repeated and prolonged skin contact. The response is typically weak with a low tumor yield and long latency period. Additional studies have shown that these tumors are produced through a nongenotoxic mechanism associated with frequent cell damage and repair, and that they are not likely to cause tumors in the absence of prolonged skin irritation. Animal studies have also shown that washing the skin with soap and water can reduce the tumor response.

Subchronic Toxicity: 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 (6gm/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.

Developmental: 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.

Diesel Exhaust Fuems

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 suggests 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. The International Agency for Research on Cancer (IARC) has evaluated diesel exhaust fumes and classified them as probably carcinogenic to humans (Group 2A) based on sufficient evidence for carcinogenicity in exposed humans.
Ethyl Benzene 100-41-4

Acute Toxicity:
Dermal LD50 = 17,800 mg/kg (Rabbit)
LC50 = 4000 ppm/4 hr; 13,367 ppm (Rat)
Oral LD50 = 3500 mg/kg (Rat)

Carcinogenicity: Rats and mice exposed to 0, 75, 250, or 750 ppm ethyl benzene in a two year inhalation study demonstrated limited evidence of kidney, liver, and lung cancer. Ethyl benzene has been listed as a possible human carcinogen by IARC. Ethyl benzene has not been listed as a carcinogen by NTP or OSHA.

Target Organs: In rats and mice exposed to 0, 75, 250, or 750 ppm ethyl benzene in a two year inhalation study there was mild damage to the kidney (tubular hyperplasia), liver (eosinophilic foci, hypertrophy, necrosis), thyroid (hyperplasia) and pituitary (hyperplasia).

Naphthalene 91-20-3

Acute Toxicity:
Dermal LD50 = >2.5 g/kg (rat)
LC50 = >340 mg/m³
Oral LD50 = 490 mg/kg; 2.6 g/kg (rat)

Carcinogenicity: Naphthalene has been evaluated in two year inhalation studies in both rats and mice. The National Toxicology Program (NTP) concluded that there is clear evidence of carcinogenicity in male and female rats based on increased incidences of respiratory epithelial adenomas and olfactory epithelial neuroblastomas of the nose. NTP found some evidence of carcinogenicity in female mice (alveolar adenomas) and no evidence of carcinogenicity in male mice. Naphthalene has been identified as a carcinogen by IARC and NTP.

12. ECOLOGICAL INFORMATION

Ecotoxicity 96 hours LC50: 21-210 mg/l (Salmo gairdneri)
48 hours EC50: 20-210 mg/l (Daphnia magna)
72 hours EC50: 2.6-25 mg/l (Raphidocellus subcapitata)
This material is expected to be toxic to aquatic organisms.

Environmental Fate Coating action of oil can kill birds, plankton, aquatic life, algae and fish. The individual hydrocarbon components of this material are differentially soluble in water with aromatic hydrocarbons tending to be more water soluble than aliphatic hydrocarbons. If spilled, the lighter components of diesel fuel will generally evaporate but depending on local environmental conditions (temperature, wind, soil type, mixing or wave action in water, etc), photo-oxidation and biodegradation, the remainder may become dispersed in the water column or absorbed to soil or sediment. Because of their differential solubility, the occurrence of hydrocarbons in groundwater will be at different proportions than the parent material. Diesel fuel would not be expected to be readily biodegradable. In a modified Strum test (OECD method 301B) approximately 40% biodegradation was recorded over 28 days. However, it has been shown that most hydrocarbon components of diesel fuel are degraded in soil in the presence of oxygen. Under anaerobic conditions, such as in anoxic sediments, rates of biodegradation are negligible.
13. DISPOSAL CONSIDERATIONS

This material, if discarded as produced, is not a RCRA "listed" hazardous waste. However, it should be fully characterized prior to disposal (40 CFR 261). Use which results in chemical or physical change or contamination may subject it to regulation as a hazardous waste. Along with properly characterizing all waste materials, consult state and local regulations regarding the proper disposal of this material.

Container contents should be completely used and containers should be emptied prior to discard. Container rinsate could be considered a RCRA hazardous waste and must be disposed of with care and in full compliance with federal, state and local regulations. Larger empty containers, such as drums, should be returned to the distributor or to a qualified drum reconditioner. To assure proper disposal of smaller empty containers, consult with state and local regulations and disposal authorities.

14. TRANSPORTATION INFORMATION

<table>
<thead>
<tr>
<th>United States Department of Transportation (US DOT)</th>
<th>International Maritime Organization (IMO/IMDG)</th>
<th>European Agreements Concerning the International Carriage by Rail (RID) and by Road</th>
<th>International Civil Aviation Organization / International Air Transport Association (ICAO/IATA)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Shipping Description:</strong> Diesel Fuel, Combustible Liquid, NA1993, PG III or Fuel Oil No. 2, Combustible Liquid, NA1993, PG III</td>
<td><strong>Shipping Description:</strong> NA1202, Diesel Fuel, 3, III or NA1202, Heating Oil, Light, 3, III (52 °C)</td>
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<td><strong>Shipping Name:</strong> Diesel Fuel or Heating Oil, Light</td>
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<td><strong>Shipping Name:</strong> Diesel Fuel or Fuel Oil No. 2</td>
<td><strong>Shipping Name:</strong> Diesel Fuel or Heating Oil, Light</td>
<td><strong>Hazard Class and Division:</strong> Combustible Liquid</td>
<td><strong>Hazard Class:</strong> 3</td>
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<tr>
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<td><strong>Hazard Class:</strong> 3</td>
<td><strong>ID Number:</strong> NA1993</td>
<td><strong>Packing Group:</strong> III</td>
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<td><strong>ID Number:</strong> NA1993</td>
<td><strong>UN Number:</strong> 1202</td>
<td><strong>Packing Group:</strong> PGIII</td>
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<td><strong>Packing Group:</strong> PGIII</td>
<td><strong>Label:</strong> Flammable Liquid</td>
<td><strong>Danger Number:</strong> 30</td>
<td><strong>Danger Number:</strong> 30</td>
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<tr>
<td><strong>Reportable Quantity:</strong> None established for this material</td>
<td><strong>Emergency Response Guide:</strong> 128</td>
<td><strong>UN Number:</strong> 1202</td>
<td><strong>UN/ID Number:</strong> 1202</td>
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<tr>
<td><strong>Emergency Response Guide:</strong> 128</td>
<td><strong>MARPOL III Status:</strong> Not a DOT Marine Pollutant per 49 CFR 171.8</td>
<td><strong>MARPOL III Status:</strong> Not a DOT Marine Pollutant per 49 CFR 71.8</td>
<td><strong>Hazard Class/Division:</strong> 3</td>
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<td><strong>MARPOL III Status:</strong> Not a DOT Marine Pollutant per 49 CFR 71.8</td>
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<td><strong>Labels:</strong> Flammable Liquid</td>
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</tbody>
</table>
15. REGULATORY INFORMATION

United States Federal Regulatory Information

**EPA TSCA Inventory**
This product and/or its components are listed on the Toxic Substances Control Act (TSCA) Inventory

**EPA SARA 302/304 Emergency Planning and Notification**
This material contains the following chemicals subject to reporting under the Superfund Amendments and Reauthorization Act of 1986 (SARA):
Product is not listed as an extremely hazardous substance

**EPA SARA 311-312 (Title III Hazard Categories)**
Acute Health: Yes
Chronic Health: No
Fire Hazard: Yes
Pressure Hazard: No
Reactive Hazard: No

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS Number</th>
<th>Concentration</th>
<th>RQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl Benzene</td>
<td>100-41-4</td>
<td>&lt; 1%</td>
<td>1000 LB</td>
</tr>
<tr>
<td>Naphthalene</td>
<td>91-20-3</td>
<td>&lt; 2%</td>
<td>100 LB</td>
</tr>
<tr>
<td>Polynuclear Aromatic Hydrocarbons</td>
<td>Mixtures</td>
<td>0.1%</td>
<td>1 LB</td>
</tr>
</tbody>
</table>

CERCLA Section 101(14) excludes crude oil and crude oil fractions, including hazardous constituents of petroleum, from the definition of hazardous substances. The petroleum exclusion applies to this product.

**EPA CWA and OPA**
This product is classified as an oil under Section 311 of the Clean Water Act (CWA) and Oil Pollution Act of 1990 (OPA), subject to spill reporting requirements.

Canadian Regulatory Information

**DSL/NDSL Inventory**
This product and/or its constituents are listed either on the Domestic Substance List (DSL) or the Non Domestic Substance List (NDSL).

**Workplace Hazardous Materials Information System (WHMIS) Hazard Class**
B3 – Combustible Liquids
D2B – Materials Causing Other Toxic Effects – Toxic Material

European Union Regulatory Information

**Labeling**
Product is dangerous as defined by the European Union Dangerous Substances / Preparations Directives
Contains: Fuels, Diesel

**Symbol**
Xn Harmful
Risk Phrases
R40-65-66
Limited evidence of a carcinogenic effect. Harmful: May cause lung damage if swallowed. Repeated exposure may cause skin dryness or cracking.

Safety Phrases
S24-2-36/37-62
Avoid contact with skin. Keep out of the reach of children. Wear suitable protective clothing and gloves. If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

California Proposition 65
This product contains a chemical known to the State of California to cause cancer, birth defects, or other reproductive harm. Chemicals known to the State of California to cause cancer, birth defects or other reproductive harm are created by the combustion of this product. Carcinogens: Benzene, Ethyl Benzene, Naphthalene, various Polynuclear Aromatic Hydrocarbons; Developmental Toxicity: Benzene, Toluene; Male Reproductive Toxicity: Benzene

Carcinogen Identification by International Agency for Research on Cancer

<table>
<thead>
<tr>
<th>Group</th>
<th>Classification</th>
<th>Chemical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 1</td>
<td>Carcinogenic to Humans</td>
<td>Benzene</td>
</tr>
<tr>
<td>Group 2A</td>
<td>Probably Carcinogenic to Humans</td>
<td>Diesel Engine Exhaust</td>
</tr>
<tr>
<td>Group 2B</td>
<td>Possibly Carcinogenic to Humans</td>
<td>Ethyl Benzene, Naphthalene</td>
</tr>
<tr>
<td>Group 3</td>
<td>Not Classifiable</td>
<td>Diesel Fuels-Distillate (Light), Fuels Oils-Distillate (Light), Xylenes</td>
</tr>
</tbody>
</table>

16. OTHER INFORMATION

Prepared By J.P. Morgan Ventures Energy Corporation
383 Madison Avenue, 10th floor
New York, NY 10017

Precautionary Label
CONTAINS DIESEL FUEL

CAUTION!

COMBUSTIBLE LIQUID AND VAPOR. RESPIRATORY IRRITATION, HEADACHE, DIZZINESS, NAUSEA, LOSS OF CONSCIOUSNESS, AND IN CASES OF EXTREME EXPOSURE, POSSIBLY DEATH. LOW VISCOSITY MATERIAL-IF SWALLOWED, MAY BE ASPIRATED AND CAN CAUSE SERIOUS OR FATAL LUNG DAMAGE. HARMFUL TO THE AQUATIC ENVIRONMENT

MAY CAUSE SKIN CANCER ON PROLONGED, REPEATED SKIN CONTACT. ANIMAL SKIN ABSORPTION STUDIES RESULTED IN INCREASED MORTALITY, EFFECTS ON BODY WEIGHT, THE IMMUNE SYSTEM AND THE UNBORN CHILD. PROLONGED, REPEATED SKIN
CONTACT MAY CAUSE IRRITATION. DIESEL EXHAUST MAY CAUSE LUNG CANCER.

USE OF THIS MATERIAL IN SPACES WITHOUT ADEQUATE VENTILATION MAY RESULT IN THE GENERATION OF HAZARDOUS LEVELS OF COMBUSTION PRODUCTS AND/OR INADEQUATE OXYGEN LEVELS FOR BREATHING. ODOR IS AN INADEQUATE WARNING FOR HAZARDOUS CONDITIONS.

Keep away from heat and flame. Avoid prolonged or repeated overexposure by skin contact or inhalation. Use with adequate ventilation. Keep container closed. Keep out of reach of children.

In case of contact, wash skin with soap and water. Immediately remove contaminated clothing, including shoes. Destroy or wash clothing before reuse. If swallowed, seek immediate medical attention. Do not induce vomiting. Only induce vomiting at the instruction of a physician.

This warning is given to comply with California Health and Safety Code 25249.6 and does not constitute an admission or a waiver of rights. This product contains a chemical known to the State of California to cause cancer, birth defects, or other reproductive harm. Chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm are created by the combustion of this product. Refer to product Material Safety Data Sheet for further safety and health information.

The information presented in this Material Safety Data Sheet is based on data believed to be accurate as of the date this Material Safety Data Sheet was prepared. HOWEVER, NO WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR ANY OTHER WARRANTY IS EXPRESSED OR IS TO BE IMPLIED REGARDING THE ACCURACY OR COMPLETENESS OF THE INFORMATION PROVIDED ABOVE, THE RESULTS TO BE OBTAINED FROM THE USE OF THIS INFORMATION OR THE PRODUCT, THE SAFETY OF THIS PRODUCT, OR THE HAZARDS RELATED TO ITS USE. No responsibility is assumed for any damage or injury resulting from abnormal use or from any failure to adhere to recommended practices. The information provided above, and the product, are furnished on the condition that the person receiving them shall make their own determination as to the suitability of the product for their particular purpose and on the condition that they assume the risk of their use. In addition, no authorization is given nor implied to practice any patented invention without a license.