



# MATERIAL SAFETY DATA SHEET

## 1. Product and Company Identification

Material name	Marine Diesel
Version #	01
Revision date	10-23-2010
CAS #	Mixture
MSDS Number	107
Product use	Motor fuels. Heating fuels.
Synonym(s)	Marine Diesel Oil, Middle Distillate, Distilled Marine Diesel See section 16 for complete information.
Manufacturer information	Valero Marketing & Supply Company and Affiliates P.O. Box 696000 San Antonio, TX 78269-6000 General Assistance 210-345-4593 24 Hour Emergency 866-565-5220 1-800-424-9300 (CHEMTREC USA)

## 2. Hazards Identification

Physical state	Liquid.
Appearance	Liquid (may be dyed red).
Emergency overview	<b>WARNING!</b> Combustible liquid and vapor. May be ignited by heat, sparks or flames. Heat may cause the containers to explode.  Harmful if inhaled or swallowed. May be harmful if absorbed through skin. Aspiration may cause lung damage. Irritating to eyes, respiratory system and skin. In high concentrations, vapors and aerosol mists have a narcotic effect and may cause headache, fatigue, dizziness and nausea. Suspect cancer hazard - may cause cancer. Prolonged exposure may cause chronic effects. Diesel exhaust has been reported to be an occupational hazard due to NIOSH-reported potential carcinogenic properties. Hydrogen sulfide, a highly toxic gas, may be present or released. Signs and symptoms of overexposure to hydrogen sulfide include respiratory and eye irritation, dizziness, nausea, coughing, a sensation of dryness and pain in the nose, and loss of consciousness. Odor does not provide a reliable indicator of the presence of hazardous levels in the atmosphere. Toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.
OSHA regulatory status	This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication).
Potential health effects	
Routes of exposure	Inhalation. Ingestion. Skin contact. Eye contact.
Eyes	Contact may irritate or burn eyes. Eye contact may result in corneal injury.
Skin	May be harmful if absorbed through skin. Irritating to skin. Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.
Inhalation	Harmful if inhaled. Irritating to respiratory system. In high concentrations, vapors and spray mists are narcotic and may cause headache, fatigue, dizziness and nausea. May cause breathing disorders and lung damage. May cause cancer by inhalation. Prolonged inhalation may be harmful.
Ingestion	Harmful if swallowed. Ingestion may result in vomiting; aspiration (breathing) of vomitus into lungs must be avoided as even small quantities may result in aspiration pneumonia. Irritating to mouth, throat, and stomach.
Target organs	Blood. Eyes. Liver. Respiratory system. Skin. Kidneys. Central nervous system.
Chronic effects	Suspect cancer hazard - may cause cancer. Liver injury may occur. Kidney injury may occur. May cause central nervous system disorder (e.g., narcosis involving a loss of coordination, weakness, fatigue, mental confusion and blurred vision) and/or damage. Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.
Signs and symptoms	Irritation of nose and throat. Irritation of eyes and mucous membranes. Skin irritation. Unconsciousness. Corneal damage. Narcosis. Decrease in motor functions. Behavioral changes. Edema. Liver enlargement. Jaundice. Defatting of the skin. Rash.

**Potential environmental effects** Toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

### 3. Composition / Information on Ingredients

Components	CAS #	Percent
Diesel fuel	68476-34-6	80 - 90
n-Nonane	111-84-2	0 - 3
n-Octane	111-65-9	0 - 3
Hexane (Other Isomers)	96-14-0	0 - 1
Naphthalene	91-20-3	0 - 1
n-Heptane	142-82-5	0 - 1
n-Hexane	110-54-3	0 - 1

### 4. First Aid Measures

#### First aid procedures

<b>Eye contact</b>	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention.
<b>Skin contact</b>	Remove contaminated clothing and shoes. Wash off immediately with soap and plenty of water. Get medical attention if irritation develops or persists. Wash clothing separately before reuse. Destroy or thoroughly clean contaminated shoes. If high pressure injection under the skin occurs, always seek medical attention.
<b>Inhalation</b>	Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention.
<b>Ingestion</b>	Rinse mouth thoroughly. Do not induce vomiting without advice from poison control center. If vomiting occurs, keep head low so that stomach content does not get into the lungs. Do not give mouth-to-mouth resuscitation. Get medical attention immediately.

**Notes to physician** In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

**General advice** IF exposed or concerned: Get medical advice/attention. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

### 5. Fire Fighting Measures

**Flammable properties** Combustible by OSHA criteria. Containers may explode when heated.

#### Extinguishing media

<b>Suitable extinguishing media</b>	Water spray. Water fog. Foam. Dry powder. Carbon dioxide (CO <sub>2</sub> ).
<b>Unsuitable extinguishing media</b>	Do not use a solid water stream as it may scatter and spread fire.

#### Protection of firefighters

**Protective equipment and precautions for firefighters** Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask.

**Fire fighting equipment/instructions** Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask. In case of fire and/or explosion do not breathe fumes. Withdraw immediately in case of rising sound from venting safety devices or any discoloration of tanks due to fire. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Move containers from fire area if you can do it without risk. For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn. Water runoff can cause environmental damage. Use compatible foam to minimize vapor generation as needed.

**Specific methods** In the event of fire and/or explosion do not breathe fumes.

**Hazardous combustion products** Carbon monoxide. Carbon Dioxide. Sulfur oxides. Nitrogen oxides (NO<sub>x</sub>). Hydrocarbons. Hydrogen sulfide.

## 6. Accidental Release Measures

### Personal precautions

Keep unnecessary personnel away. Local authorities should be advised if significant spills cannot be contained. Keep upwind. Keep out of low areas. Ventilate closed spaces before entering them. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. See Section 8 of the MSDS for Personal Protective Equipment.

### Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not contaminate water. If facility or operation has an "oil or hazardous substance contingency plan", activate its procedures. Stay upwind and away from spill. Wear appropriate protective equipment including respiratory protection as conditions warrant. Do not enter or stay in area unless monitoring indicates that it is safe to do so. Isolate hazard area and restrict entry to emergency crew. Flammable. Review Fire Fighting Measures, Section 5, before proceeding with clean up. Keep all sources of ignition (flames, smoking, flares, etc.) and hot surfaces away from release. Contain spill in smallest possible area. Recover as much product as possible (e.g. by vacuuming). Stop leak if it can be done without risk. Use water spray to disperse vapors. Use compatible foam to minimize vapor generation as needed. Spilled material may be absorbed by an appropriate absorbent, and then handled in accordance with environmental regulations. Prevent spilled material from entering sewers, storm drains, other unauthorized treatment or drainage systems and natural waterways. Contact fire authorities and appropriate federal, state and local agencies. If spill of any amount is made into or upon navigable waters, the contiguous zone, or adjoining shorelines, contact the National Response Center at 1-800-424-8802. For highway or railways spills, contact Chemtrec at 1-800-424-9300.

### Methods for containment

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Local authorities should be advised if significant spillages cannot be contained. This material is a water pollutant and should be prevented from contaminating soil or from entering sewage and drainage systems and bodies of water. Dike the spilled material, where this is possible. Prevent entry into waterways, sewers, basements or confined areas.

### Methods for cleaning up

Use non-sparking tools and explosion-proof equipment.

Small Spills: Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Clean surface thoroughly to remove residual contamination. This material and its container must be disposed of as hazardous waste.

Large Spills: Prevent product from entering drains. Do not allow material to contaminate ground water system. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Should not be released into the environment.

### Other information

Clean up in accordance with all applicable regulations.

## 7. Handling and Storage

### Handling

Wear personal protective equipment. Avoid breathing mists or vapors. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Wash thoroughly after handling. The product is combustible, and heating may generate vapors which may form explosive vapor/air mixtures. DO NOT handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. All equipment used when handling the product must be grounded. Avoid release to the environment.

### Storage

Flammable liquid storage. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. The pressure in sealed containers can increase under the influence of heat. Keep container tightly closed in a cool, well-ventilated place. Keep away from food, drink and animal feedingstuffs. Keep out of the reach of children.

## 8. Exposure Controls / Personal Protection

### Occupational exposure limits

#### US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Diesel fuel (68476-34-6)	TWA	100 mg/m3	Inhalable fraction and vapor.
Hexane (Other Isomers) (96-14-0)	STEL	1000 ppm	
Naphthalene (91-20-3)	TWA	500 ppm	
	STEL	15 ppm	
n-Heptane (142-82-5)	TWA	10 ppm	
	STEL	500 ppm	
n-Hexane (110-54-3)	TWA	400 ppm	
	TWA	50 ppm	

**US. ACGIH Threshold Limit Values**

Components	Type	Value	Form
n-Nonane (111-84-2)	TWA	200 ppm	
n-Octane (111-65-9)	TWA	300 ppm	

**US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

Components	Type	Value
Naphthalene (91-20-3)	PEL	50 mg/m3 10 ppm
n-Heptane (142-82-5)	PEL	500 ppm 2000 mg/m3
n-Hexane (110-54-3)	PEL	1800 mg/m3 500 ppm
n-Octane (111-65-9)	PEL	500 ppm 2350 mg/m3

**Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)**

Components	Type	Value
Diesel fuel (68476-34-6)	TWA	100 mg/m3
Hexane (Other Isomers) (96-14-0)	STEL	1000 ppm 3500 mg/m3
	TWA	500 ppm 1760 mg/m3
Naphthalene (91-20-3)	STEL	15 ppm 79 mg/m3
	TWA	10 ppm 52 mg/m3
n-Heptane (142-82-5)	STEL	2050 mg/m3 500 ppm
	TWA	400 ppm 1640 mg/m3
n-Hexane (110-54-3)	TWA	176 mg/m3 50 ppm
n-Nonane (111-84-2)	TWA	200 ppm 1050 mg/m3
n-Octane (111-65-9)	TWA	300 ppm 1400 mg/m3

**Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)**

Components	Type	Value	Form
Diesel fuel (68476-34-6)	TWA	100 mg/m3	Vapor and aerosol.
Hexane (Other Isomers) (96-14-0)	TWA	200 ppm	
Naphthalene (91-20-3)	STEL	15 ppm	
	TWA	10 ppm	
n-Heptane (142-82-5)	STEL	500 ppm	
	TWA	400 ppm	
n-Hexane (110-54-3)	TWA	20 ppm	
n-Nonane (111-84-2)	TWA	200 ppm	
n-Octane (111-65-9)	TWA	300 ppm	

**Canada. Ontario OELs. (Ministry of Labor - Control of Exposure to Biological or Chemical Agents)**

Components	Type	Value	Form
Diesel fuel (68476-34-6)	TWA	100 mg/m3	Vapor and aerosol.
Hexane (Other Isomers) (96-14-0)	STEL	1000 ppm	
	TWA	3520 mg/m3 500 ppm 1760 mg/m3	

**Canada. Ontario OELs. (Ministry of Labor - Control of Exposure to Biological or Chemical Agents)**

Components	Type	Value	Form
Naphthalene (91-20-3)	STEL	15 ppm	
		78 mg/m3	
	TWA	52 mg/m3	
		10 ppm	
n-Heptane (142-82-5)	STEL	500 ppm	
		2045 mg/m3	
	TWA	1635 mg/m3	
		400 ppm	
n-Hexane (110-54-3)	TWA	50 ppm	
		176 mg/m3	
n-Nonane (111-84-2)	TWA	200 ppm	
		1050 mg/m3	
n-Octane (111-65-9)	STEL	375 ppm	
		1750 mg/m3	
	TWA	300 ppm	
		1400 mg/m3	

**Canada. Quebec OELS. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment)**

Components	Type	Value
Hexane (Other Isomers) (96-14-0)	STEL	3500 mg/m3
		1000 ppm
	TWA	1760 mg/m3
		500 ppm
Naphthalene (91-20-3)	STEL	79 mg/m3
		15 ppm
	TWA	10 ppm
		52 mg/m3
n-Heptane (142-82-5)	STEL	2050 mg/m3
		500 ppm
	TWA	400 ppm
		1640 mg/m3
n-Hexane (110-54-3)	TWA	50 ppm
		176 mg/m3
n-Nonane (111-84-2)	TWA	200 ppm
		1050 mg/m3
n-Octane (111-65-9)	STEL	1750 mg/m3
		375 ppm
	TWA	300 ppm
		1400 mg/m3

**Mexico. Occupational Exposure Limit Values**

Components	Type	Value
Hexane (Other Isomers) (96-14-0)	STEL	1000 ppm
	TWA	3500 mg/m3
		1760 mg/m3
		500 ppm
Naphthalene (91-20-3)	STEL	75 mg/m3
		15 ppm
	TWA	50 mg/m3
		10 ppm
n-Heptane (142-82-5)	STEL	500 ppm
		2000 mg/m3
	TWA	400 ppm
		1600 mg/m3
n-Hexane (110-54-3)	TWA	50 ppm
		176 mg/m3
n-Nonane (111-84-2)	STEL	1300 mg/m3
		250 ppm
	TWA	1050 mg/m3
		200 ppm
n-Octane (111-65-9)	STEL	375 ppm

**Mexico. Occupational Exposure Limit Values**

Components	Type	Value
	TWA	1800 mg/m3 1450 mg/m3 300 ppm
<b>Engineering controls</b>	Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Provide adequate general and local exhaust ventilation. Use explosion-proof equipment.	
<b>Personal protective equipment</b>		
<b>Eye / face protection</b>	Wear safety glasses. If splash potential exists, wear full face shield or chemical goggles.	
<b>Skin protection</b>	Full body suit and boots are recommended when handling large volumes or in emergency situations. Flame retardant protective clothing is recommended. Wear chemical-resistant, impervious gloves.	
<b>Respiratory protection</b>	Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If workplace exposure limits for product or components are exceeded, NIOSH approved equipment should be worn. Proper respirator selection should be determined by adequately trained personnel, based on the contaminants, the degree of potential exposure and published respiratory protection factors. This equipment should be available for nonroutine and emergency use.	
<b>General hygiene considerations</b>	Consult supervisor for special handling instructions. Avoid contact with skin. Handle in accordance with good industrial hygiene and safety practice. Provide eyewash station and safety shower.	

**9. Physical & Chemical Properties**

<b>Appearance</b>	Liquid (may be dyed red).
<b>Color</b>	Clear. Straw.
<b>Odor</b>	Kerosene (strong).
<b>Odor threshold</b>	Not available.
<b>Physical state</b>	Liquid.
<b>Form</b>	Liquid.
<b>pH</b>	Not available.
<b>Melting point</b>	-60 °F (-51.1 °C) Approximate.
<b>Freezing point</b>	Not available.
<b>Boiling point</b>	325 - 700 °F (162.8 - 371.1 °C)
<b>Flash point</b>	> 100 °F (> 37.8 °C) Closed Cup
<b>Evaporation rate</b>	Not available.
<b>Flammability</b>	Combustible.
<b>Flammability limits in air, upper, % by volume</b>	8 %
<b>Flammability limits in air, lower, % by volume</b>	0.4 %
<b>Vapor pressure</b>	< 1 mm Hg (20°C)
<b>Vapor density</b>	3 (Air = 1)
<b>Specific gravity</b>	0.84 - 0.93 @ 60 deg F
<b>Solubility (water)</b>	Not available.
<b>Partition coefficient (n-octanol/water)</b>	No data available.
<b>Auto-ignition temperature</b>	495 °F (257.2 °C)
<b>Decomposition temperature</b>	Not available.

**10. Chemical Stability & Reactivity Information**

<b>Chemical stability</b>	Stable under normal temperature conditions and recommended use.
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<b>Conditions to avoid</b>	Heat, flames and sparks. Ignition sources. Contact with incompatible materials. Do not pressurize, cut, weld, braze, solder, drill, grind or expose empty containers to heat, flame, sparks, static electricity, or other sources of ignition; they may explode and cause injury or death.
<b>Incompatible materials</b>	Strong oxidizing agents.
<b>Hazardous decomposition products</b>	Carbon oxides. Sulfur oxides. Nitrogen Oxides. Hydrocarbons. Hydrogen sulfide.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.

## 11. Toxicological Information

### Toxicological data

Product	Test Results
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Marine Diesel (Mixture)	Acute Inhalation LC50 Mouse: 13812 mg/l estimated
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Components	Test Results
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n-Octane (111-65-9)	Acute Inhalation LC50 Rat: 118 mg/l 4 Hours
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n-Nonane (111-84-2)	Acute Inhalation LC50 Rat: 3200 mg/l 4 Hours
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n-Heptane (142-82-5)	Acute Inhalation LC50 Rat: 103 mg/l 4 Hours
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Naphthalene (91-20-3)	Acute Dermal LD50 Rabbit: > 2 g/kg
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	Acute Oral LD50 Rat: 490 mg/kg
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**Acute effects** Harmful if inhaled, absorbed through skin, or swallowed. Harmful: may cause lung damage if swallowed. Irritating to eyes, respiratory system and skin. In high concentrations, vapors and spray mists are narcotic and may cause headache, fatigue, dizziness and nausea. Hydrogen sulfide, a highly toxic gas, may be present. Signs and symptoms of overexposure to hydrogen sulfide include respiratory and eye irritation, dizziness, nausea, coughing, a sensation of dryness and pain in the nose, and loss of consciousness. Odor does not provide a reliable indicator of the presence of hazardous levels in the atmosphere.

### Local effects

#### US ACGIH Threshold Limit Values: Skin designation

Benzene (CAS 71-43-2)	Can be absorbed through the skin.
Diesel fuel (CAS 68476-34-6)	Can be absorbed through the skin.
Naphthalene (CAS 91-20-3)	Can be absorbed through the skin.
n-Hexane (CAS 110-54-3)	Can be absorbed through the skin.

**Sensitization** This substance may have a potential for sensitization which may provoke an allergic reaction among sensitive individuals.

**Chronic effects** Contains organic solvents which in case of overexposure may depress the central nervous system causing dizziness and intoxication. Repeated exposure to naphthalene may cause cataracts, allergic skin rashes, destruction of red blood cells, and anemia, jaundice, kidney and liver damage. Danger of serious damage to health by prolonged exposure. Prolonged or repeated overexposure may cause central nervous system, kidney, liver, and lung damage.

**Subchronic effects** Liver and kidney damage may occur after prolonged and repeated exposure.

**Carcinogenicity** Diesel exhaust has been reported to be an occupational hazard due to NIOSH-reported potential carcinogenic properties.

#### ACGIH Carcinogens

Benzene (CAS 71-43-2)	A1 Confirmed human carcinogen.
Diesel fuel (CAS 68476-34-6)	A3 Confirmed animal carcinogen with unknown relevance to humans.
Naphthalene (CAS 91-20-3)	A4 Not classifiable as a human carcinogen.
Toluene (CAS 108-88-3)	A4 Not classifiable as a human carcinogen.

#### IARC Monographs. Overall Evaluation of Carcinogenicity

Benzene (CAS 71-43-2)	1 Carcinogenic to humans.
Naphthalene (CAS 91-20-3)	2B Possibly carcinogenic to humans.
Toluene (CAS 108-88-3)	3 Not classifiable as to carcinogenicity to humans.

#### US NTP Report on Carcinogens: Anticipated carcinogen

Naphthalene (CAS 91-20-3)	Anticipated carcinogen.
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#### US NTP Report on Carcinogens: Known carcinogen

Benzene (CAS 71-43-2)	Known carcinogen.
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## US OSHA Specifically Regulated Substances: Cancer hazard

Benzene (CAS 71-43-2)

Cancer hazard.

<b>Epidemiology</b>	Studies have shown a risk of spontaneous abortions in women exposed to high concentrations of organic solvents during pregnancy. Pre-existing skin conditions including dermatitis might be aggravated by exposure to this product.
<b>Mutagenicity</b>	No component of this product present at levels greater than or equal to 0.1% is identified as a mutagen by OSHA.
<b>Neurological effects</b>	Chronic exposure to high concentrations of various hydrocarbon blends may lead to polyneuropathy (peripheral nerve damage), characterized by progressive weakness and numbness in the extremities, loss of deep tendon reflexes and reduction of motor nerve conduction velocity. Numerous cases of polyneuritis have been reported following prolonged exposures to a petroleum fraction containing various isomers of heptane as major ingredients. May cause central nervous system disorder (e.g., narcosis involving a loss of coordination, weakness, fatigue) and/or damage.
<b>Reproductive effects</b>	Napthalene interferes with embryo development in experimental animals at dose levels that cause maternal toxicity. In humans, excessive exposure to this agent may cause hemolytic anemia in the mother and fetus.
<b>Teratogenicity</b>	The components of this product are not reported to cause teratogenic effects in humans. Based on best current information, there is no known teratogenicity associated with this product.
<b>Further information</b>	Symptoms may be delayed.

## 12. Ecological Information

### Ecotoxicological data

Components	Test Results
n-Hexane (110-54-3)	LC50 Fathead minnow (Pimephales promelas): 2.101 - 2.981 mg/l 96 hours
n-Heptane (142-82-5)	LC50 Mozambique tilapia (Tilapia mossambica): 375 mg/l 96 hours
Naphthalene (91-20-3)	LC50 Rainbow trout, donaldson trout (Oncorhynchus mykiss): 0.91 - 2.82 mg/l 96 hours

<b>Ecotoxicity</b>	Contains a substance which causes risk of hazardous effects to the environment.
<b>Environmental effects</b>	The product contains a substance which is toxic to aquatic organisms and which may cause long-term adverse effects in the aquatic environment.
<b>Aquatic toxicity</b>	May cause long-term adverse effects in the aquatic environment.
<b>Persistence and degradability</b>	No data available.
<b>Bioaccumulation / Accumulation</b>	No data available.
<b>Partition coefficient (n-octanol/water)</b>	No data available.
<b>Mobility in environmental media</b>	No data available.

## 13. Disposal Considerations

<b>Waste codes</b>	D001: Waste Flammable material with a flash point <140 °F
<b>Disposal instructions</b>	Dispose of this material and its container to hazardous or special waste collection point. Incinerate the material under controlled conditions in an approved incinerator. Do not dispose of waste into sewer. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose in accordance with all applicable regulations.

## 14. Transport Information

### DOT

#### Basic shipping requirements:

<b>UN number</b>	NA1202
<b>Proper shipping name</b>	Diesel fuel
<b>Hazard class</b>	Combustible Liquid
<b>Packing group</b>	III
<b>Labels required</b>	Combustible liquid



**Additional information:**

Special provisions	144, B1, IB3, T2, TP1
Packaging exceptions	150
Packaging non bulk	203
Packaging bulk	242

**IATA**

**Basic shipping requirements:**

UN number	1202
Proper shipping name	Diesel fuel
Hazard class	3
Packing group	III
Additional information:	
ERG code	3L

**IMDG**

**Basic shipping requirements:**

UN number	1202
Proper shipping name	Diesel fuel
Hazard class	3
Packing group	III
EmS No.	F-E, S-E

**TDG**

**Basic shipping requirements:**

Proper shipping name	Diesel fuel
Hazard class	3
UN number	UN1202
Packing group	III



**DOT**



**IATA**



**IMDG**



**TDG**

## 15. Regulatory Information

### US federal regulations

**US TSCA Section 12(b) Export Notification: Export Notification requirement/De minimis concentration**

Naphthalene (CAS 91-20-3)	0.1 % One-Time Export Notification only.
n-Heptane (CAS 142-82-5)	1.0 % One-Time Export Notification only.
n-Nonane (CAS 111-84-2)	1.0 % One-Time Export Notification only.

**US EPCRA (SARA Title III) Section 313 - Toxic Chemical: De minimis concentration**

Benzene (CAS 71-43-2)	0.1 %
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Naphthalene (CAS 91-20-3)	0.1 %
n-Hexane (CAS 110-54-3)	1.0 %
Toluene (CAS 108-88-3)	1.0 %

**US EPCRA (SARA Title III) Section 313 - Toxic Chemical: Listed substance**

Benzene (CAS 71-43-2)	Listed.
Naphthalene (CAS 91-20-3)	Listed.
n-Hexane (CAS 110-54-3)	Listed.
Toluene (CAS 108-88-3)	Listed.

**CERCLA (Superfund) reportable quantity (lbs)**

n-Nonane 100  
n-Octane 100  
Hexane (Other Isomers) 100  
Naphthalene 100  
n-Heptane 100  
n-Hexane 5000

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

<b>Hazard categories</b>	Immediate Hazard - Yes Delayed Hazard - Yes Fire Hazard - Yes Pressure Hazard - No Reactivity Hazard - No
<b>Section 302 extremely hazardous substance</b>	No
<b>Section 311 hazardous chemical</b>	Yes
<b>Drug Enforcement Agency (DEA)</b>	Not controlled
<b>WHMIS status</b>	Controlled
<b>WHMIS classification</b>	B2 - Flammable/Combustible D2A - Other Toxic Effects-VERY TOXIC D2B - Other Toxic Effects-TOXIC

**WHMIS labeling**



**Inventory status**

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

**State regulations** WARNING: This product contains a chemical known to the State of California to cause cancer.

**US - California Hazardous Substances (Director's): Listed substance**

Benzene (CAS 71-43-2)	Listed.
Hexane (Other Isomers) (CAS 96-14-0)	Listed.

Naphthalene (CAS 91-20-3)	Listed.
n-Heptane (CAS 142-82-5)	Listed.
n-Hexane (CAS 110-54-3)	Listed.
n-Nonane (CAS 111-84-2)	Listed.
n-Octane (CAS 111-65-9)	Listed.
Toluene (CAS 108-88-3)	Listed.

**US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance**

Benzene (CAS 71-43-2)	Listed.
Naphthalene (CAS 91-20-3)	Listed.
Toluene (CAS 108-88-3)	Listed.

**US - California Proposition 65 - CRT: Listed date/Carcinogenic substance**

Benzene (CAS 71-43-2)	Listed: February 27, 1987 Carcinogenic.
Naphthalene (CAS 91-20-3)	Listed: April 19, 2002 Carcinogenic.

**US - California Proposition 65 - CRT: Listed date/Developmental toxin**

Benzene (CAS 71-43-2)	Listed: December 26, 1997 Developmental toxin.
Toluene (CAS 108-88-3)	Listed: January 1, 1991 Developmental toxin.

**US - California Proposition 65 - CRT: Listed date/Female reproductive toxin**

Toluene (CAS 108-88-3)	Listed: August 7, 2009 Female reproductive toxin.
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**US - California Proposition 65 - CRT: Listed date/Male reproductive toxin**

Benzene (CAS 71-43-2)	Listed: December 26, 1997 Male reproductive toxin.
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**US - Massachusetts RTK - Substance: Listed substance**

Benzene (CAS 71-43-2)	Listed.
Hexane (Other Isomers) (CAS 96-14-0)	Listed.
Naphthalene (CAS 91-20-3)	Listed.
n-Heptane (CAS 142-82-5)	Listed.
n-Hexane (CAS 110-54-3)	Listed.
n-Nonane (CAS 111-84-2)	Listed.
n-Octane (CAS 111-65-9)	Listed.
Toluene (CAS 108-88-3)	Listed.

**US - New Jersey Community RTK (EHS Survey): Reportable threshold**

Benzene (CAS 71-43-2)	500 LBS
Diesel fuel (CAS 68476-34-6)	10000 LBS
Naphthalene (CAS 91-20-3)	500 LBS
n-Hexane (CAS 110-54-3)	500 LBS
Toluene (CAS 108-88-3)	500 LBS

**US - New Jersey RTK - Substances: Listed substance**

Benzene (CAS 71-43-2)	Listed.
Naphthalene (CAS 91-20-3)	Listed.
n-Heptane (CAS 142-82-5)	Listed.
n-Hexane (CAS 110-54-3)	Listed.
n-Nonane (CAS 111-84-2)	Listed.
n-Octane (CAS 111-65-9)	Listed.
Toluene (CAS 108-88-3)	Listed.

**US - Pennsylvania RTK - Hazardous Substances: Listed substance**

Benzene (CAS 71-43-2)	Listed.
Diesel fuel (CAS 68476-34-6)	Listed.
Hexane (Other Isomers) (CAS 96-14-0)	Listed.
Naphthalene (CAS 91-20-3)	Listed.
n-Heptane (CAS 142-82-5)	Listed.
n-Hexane (CAS 110-54-3)	Listed.
n-Nonane (CAS 111-84-2)	Listed.
n-Octane (CAS 111-65-9)	Listed.
Toluene (CAS 108-88-3)	Listed.

**US - Pennsylvania RTK - Hazardous Substances: Special hazard**

Benzene (CAS 71-43-2)	Special hazard.
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## 16. Other Information

**Further information**

HMIS® is a registered trade and service mark of the NPCA.

**Other information**

Note: This Material Safety Data Sheet applies to the listed products and synonym descriptions for Hazard Communication purposes only. Technical Specifications vary greatly depending on the products and are not reflected in this document. Consult specification sheets for technical information.

**HMIS® ratings**

Health: 2\*  
Flammability: 2  
Physical hazard: 0

**NFPA ratings**

Health: 1  
Flammability: 3  
Instability: 0

**Disclaimer**

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