



MATERIAL SAFETY DATA SHEET

MSDS # F2

SINCLAIR DIESEL

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

TRADE NAME: Diesel

APPLICATIONS: Diesel – Dyed Fuel

SYNONYMS: No. 2 Diesel Fuel, Ultra Low Sulfur Diesel - Dyed and Undyed, Oil Distillate, Cycle Oil, Fuel Oil, Diesels Cycle Oil, Furnace Oil

CAS REGISTRY #: #1 Diesel 8008-20-6
#2 Diesel 68476-34-6

CHEMICAL FAMILY: Liquid Hydrocarbons

EMERGENCY PHONE: CHEMTREC – (800) 424-9300 or (703) 527-3887 (collect)

SUPPLIER: Sinclair Oil Corporation
P.O. Box 30825
Salt Lake City, Utah 84130

TELEPHONE / FAX: (888) 340-3466 / (801) 524-2740

2. COMPOSITION, INFORMATION ON INGREDIENTS

COMPONENTS:	CAS#	Typical wt.%
#1 Diesel	8008-20-6	100
Toluene	108-88-3	0 – 0.5
Naphthalene	91-20-3	0 – 0.5
#2 Diesel	68476-34-6	100
Toluene	108-88-3	0 – 0.5
Naphthalene	91-20-3	0 – 0.5

3. HAZARDS IDENTIFICATION

APPEARANCE: Colorless, red, blue, amber

PHYSICAL STATE: Liquid

ODOR: Kerosene odor

EMERGENCY OVERVIEW: May cause eye, skin and respiratory tract irritation. Combustible liquid and vapor. Harmful or fatal if swallowed. Toxic to aquatic organisms.

POTENTIAL HEALTH EFFECTS: Trauma and burns secondary to explosions and fires can result. In enclosed spaces, oxygen may be displaced by vapors or consumed by combustion. Incomplete combustion will produce carbon monoxide and other toxic gases.

INHALATION: Overexposure may cause weakness, headache, nausea, confusion, blurred vision, drowsiness and other central nervous system effects.

EYE CONTACT: Contact may cause eye irritation. Naphthalene vapor causes eye irritation.

SKIN CONTACT: Contact may irritate or burn skin. Absorption through the skin may cause symptoms of intoxication, followed by kidney damage.

INGESTION: Contact may irritate or burn skin. Absorption through the skin may cause symptoms of intoxication, followed by kidney damage.

4. FIRST AID MEASURES

GENERAL: Remove all clothing impregnated with material immediately. Consult a physician for major exposures of inhalation or skin contact.

INHALATION: Remove from further exposure. If unconsciousness occurs, seek immediate medical assistance. If breathing stops, use mouth-to-mouth resuscitation.

EYE CONTACT: Flush immediately with water for at least 15 minutes. Seek medical attention promptly.

SKIN CONTACT: Discard contaminated leather articles. Wash contact areas with soap and water. Launder contaminated clothing before reuse.

INGESTION: DO NOT INDUCE VOMITING. Get medical assistance promptly. (Note to Physician: Material, if aspirated into lungs, may cause chemical pneumonitis. Treat appropriately.)

5. FIRE FIGHTING MEASURES

FLASH POINT (°F): 100°F Minimum

FLAMMABLE LIMITS: LEL – 1.3 UEL – 6.0

AUTOIGNITION TEMPERATURE: 490°F - 545°F

FLAMMABILITY CLASSIFICATION: Combustible Liquid

GENERAL HAZARD: Incomplete burning can produce carbon monoxide. Vapors will be released above flash point and when mixed with air, can burn or explode in confined space if exposed to sources of ignition.

FIRE FIGHTING INSTRUCTIONS: Use foam, dry chemical, CO₂, water fog or vaporizing liquid (Halon). Keep personnel removed from and up-wind of fire. Cool adjacent structures and storage drums with water spray. Evacuate area. Prevent runoff from fire control dilution from entering streams or drinking water supply.

FIRE FIGHTING EQUIPMENT: Use of SCBA in enclosed or confined spaces, or as otherwise needed. Bunker gear.

HAZARDOUS COMBUSTION PRODUCTS: May produce carbon monoxide.

6. ACCIDENTAL RELEASE MEASURES

LAND SPILL: Shut off and eliminate all ignition sources. Keep people away. Remove leaking containers to a safe area. Contain and remove by mechanical means. Add sand, earth or other suitable absorbent to spill area than scrape off the ground. Guard against contamination of water supplies. Report spills to appropriate authorities. Dispose of in accordance with Federal, State and Local regulations.

WATER SPILL: Spill may be removed from water with mechanical dredges or lifts. Report spills to appropriate authorities. Dispose of in accordance with Federal, State and Local regulations.

7. HANDLING AND STORAGE

HANDLING / STORAGE: Ground and bond all transfer and storage equipment. Drums must be grounded/ bonded/ equipped with self-closing valves, pressure vacuum bungs and flame arrestors. Store away from ignition sources in a cool area. Outside or detached storage is preferred.

When handling use non-sparking tools and equipment. Do not use as a cleaner or solvent, use only as fuel. Do not siphon by mouth.

8. EXPOSURE CONTROLS, RESPIRATORY & PERSONAL PROTECTION

ENGINEERING CONTROLS: Provide ventilation sufficient to prevent exceeding recommended exposure limit or build-up of explosive concentrations of vapor in air. Use explosion-proof equipment.

PERSONAL PROTECTION: If contact is likely the following protective clothing and equipment is recommended.

PROTECTIVE CLOTHING: Use full-face shield, chemical goggles, impervious gloves, boots and whole body protection.

RESPIRATOR: Approved respiratory protection must be used when vapors or mist concentrations are unknown or exceed the TLV. Avoid prolonged or repeated breathing of vapor or mists.

OCUPATIONAL EXPOSURE LIMITS

COMPONENT	LIMIT	TWA	STEL	CEILING	NOTATION	OTHER
Diesel	ACGIH_TLV	100mg/M ³			A3	Skin, Irritation
Toluene	OSHA_PEL	200ppm		300ppm		
Toluene	ACGIH_TLV	50ppm			A4	Skin, CNS
Naphthalene	OSHA_PEL	10ppm				
Naphthalene	ACGIH_TLV	10ppm	15ppm		A4	Skin
Petroleum Distillates (Naphtha)	OSHA_PEL	500ppm				

A3= Confirmed Animal Carcinogen with Unknown Relevance to Humans

A4= Not Classified as a Human Carcinogen

CNS= Central Nervous System

Skin= Absorption through the skin may contribute to overall exposure

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE/PHYSICAL STATE: Liquid

COLOR: colorless, red, blue, or amber

DENSITY/SPECIFIC GRAVITY (g/ml): 0.75 – 0.90

VAPOR DENSITY (air=1): >1

VAPOR PRESSURE: <1 PSIA

BOILING POINT/RANGE: 550°F

SOLUBILITY IN WATER: No

VISCOSITY: N/A/F

pH : N/A

FREEZING POINT: 0°F

10. STABILITY AND REACTIVITY

GENERAL: This product is stable

INCOMPATIBLE MATERIALS AND CONDITIONS TO AVOID: Strong acids, alkalies and oxidizers. Avoid heat, sparks, flame and static electricity.

HAZARDOUS DECOMPOSITION: Incomplete burning can produce carbon monoxide.

11. TOXICOLOGICAL INFORMATION

SYSTEMIC: Petroleum-derived fuels and fuel oils are complex and variable mixtures of hydrocarbons. In general, the more viscous the mixture, the less toxic it will be. At high level exposures, humans experience multiple organ failures, some of which may be due to hypoxia and secondary to the failure of other organ systems. In humans kidney failure has been noted only at high, acute levels of exposures, and appears reversible. Liver enzymes may be transiently elevated. At lower level exposures, most acute health effects are reversible. People can be exposed by inhalation, ingestion and dermal contact. Frequently, people are exposed by combined dermal and inhalation exposure.

ACUTE:

Inhalation: Headaches, confusion, disorientation, blurred vision occur with inhalation. Higher exposures may cause hallucinations, CNS excitation, drowsiness, CNS depression. Seizure and coma occur from very high exposures and death may result from respiratory depression. ECG changes, cardiac arrhythmias, tachycardia, shock and cardiovascular collapse can occur. Pneumonia, pulmonary edema and hemorrhages can occur. Inhalation of 8000-16000 mg/m³ for 2 to 4 hours was lethal to rats.

Ingestion: Central nervous system, cardiovascular, and respiratory effects have been reported with acute exposures to various hydrocarbon fuels and oils similar to those reported with inhalation. Nausea, vomiting, cramping and diarrhea may occur.

Eye: Conjunctivitis and burning, watery eyes have been reported in acute exposures to various hydrocarbon fuels and oils.

Skin: Mild erythema to full thickness chemical burns have occurred after prolonged exposure to various hydrocarbon fuels and oils.

CHRONIC: Chronic dermatitis with acanthosis, inflammation, parakeratosis and hyperkeratosis have occurred with chronic exposures to various hydrocarbon fuels and oils. Occupational exposures in petroleum refining are considered Group 2A (probably carcinogenic) by IARC.

12. DISPOSAL INFORMATION

RCRA: Disposal of this product or material contaminated with this product may be regulated by RCRA due to the characteristic of ignitability.

EPA Hazard Class: Acute Hazard/Chronic Hazard/Fire Hazard

Dispose of in accordance with Federal, State, and Local regulations.

13. TRANSPORT INFORMATION

DOT (Department of Transportation):

PROPER SHIPPING NAME: Combustible Liquid nos (Diesel #1, Diesel #2)

HAZARD CLASS: Combustible Liquid

IDENTIFICATION NUMBER: UN 1993 PGIII

NAERG96 NUMBER: 128

14. REGULATORY INFORMATION

CERCLA (Comprehensive Environmental Response Compensation and Liability Act): Naphthalene and Toluene are hazardous substances under CERCLA and therefore are subject to emergency notification requirements.

SARA TITLE III (Superfund Amendments and Reauthorization Act): Naphthalene and Toluene are subject to SARA Title III, Sections 311 and 312, which require MSDS reporting and hazardous chemical inventory reporting.

Naphthalene and Toluene are also subject to SARA Title III, Section 313, which requires chemical release reporting.

14. REGULATORY INFORMATION CONTINUED

The following components are subject to OSHA 29CFR1910.1200 Hazard Communication Standard:

Toluene

Naphthalene

Petroleum Distillates

15. OTHER INFORMATION

NFPA 704/HMIS:

Health – 0 Flammability – 2 Reactivity – 0

(0 = insignificant, 1 = slight, 2 = moderate, 3 = high, 4 = extreme)

REVISION SUMMARY:

Complete review of MSDS, January 2007.

THIS PRODUCT MATERIAL SAFETY DATA SHEET PROVIDES HEALTH AND SAFETY INFORMATION. THE PRODUCT SHOULD BE USED IN APPLICATIONS CONSISTENT WITH THIS PRODUCT LITERATURE. FOR ANY OTHER USES, EXPOSURES SHOULD BE EVALUATED SO THAT APPROPRIATE HANDLING PRACTICES AND TRAINING PROGRAMS CAN BE ESTABLISHED TO ENSURE SAFE WORKPLACE OPERATIONS.

THIS MATERIAL SAFETY DATA SHEET IS PROVIDED IN GOOD FAITH AND MEETS THE REQUIREMENTS OF THE HAZARDOUS COMMUNICATION PROVISIONS OF SARA TITLE III AND 29CFR1910.1200(g) OF THE OSHA REGULATIONS. THE ABOVE INFORMATION IS BASED ON REVIEW OF AVAILABLE INFORMATION SINCLAIR BELIEVES IS RELIABLE AND IS SUPPLIED FOR INFORMATIONAL PURPOSES ONLY. SINCLAIR DOES NOT GUARANTEE ITS COMPLETENESS OR ACCURACY. SINCE CONDITIONS OF USE ARE OUTSIDE THE CONTROL OF SINCLAIR, SINCLAIR DISCLAIMS ALL WARRANTIES, EXPRESS OR IMPLIED, AND ANY LIABILITY FOR DAMAGE OR INJURY WHICH RESULTS FROM THE USE OF THE ABOVE DATA. NOTHING HEREIN IS INTENDED TO PERMIT INFRINGEMENT OF VALID PATENTS AND LICENSES.

DATE: January 2007