



# Material Safety Data Sheet

**Kerosene**  
MSDS # 10-31-08B  
Date Prepared: 06/03/91  
Date Reviewed: 09/25/06  
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## 1 Product Identification

Product Name: **Kerosene**  
General or Generic ID: **#1 Fuel Oil**  
CAS Number: **8008-20-6**  
DOT Hazard Classification: **Combustible**  
Synonyms: **#1 Diesel Fuel; K-1 Kerosene; #1 Heating Oil; Dyed Kerosene, Clear Kerosene (including ultra low sulfur-15ppm)**

## 2 Components

Ingredient	CAS #	% by wt.	PEL	TLV
Saturated Hydrocarbons	N/A	70-80	N/A	N/A
Unsaturated Hydrocarbons	N/A	3-6	N/A	N/A
Aromatic Hydrocarbons	N/A	17-25	N/A	N/A
Benzene	71-43-2	<.01	10 ppm	1 ppm

## 3 Physical Data

Boiling Point	350° to 570°F
Vapor Pressure	1 to 10 MM Hg @ 100°F
Vapor Density (air = 1)	4 to 5
Specific Gravity	0.80
Percent Volatiles	15 to 45
Water Solubility	Nil
Odor	Kerosene
Appearance	Clear to Red Liquid

## 4 Fire and Explosion Information

Flash Point	120°F (min)
Auto Ignition Temperature	410°F
Explosive Limits (% by volume in air)	Lower Limit 0.7 Upper Limit 5.0
Extinguishing Media	Class B, such as Halon, CO <sub>2</sub> or dry chemical
Special Fire Fighting Procedures	Flashback may occur along vapor trail. Avoid use of solid water streams. Water may be ineffective in extinguishing low flash point fires, but can be used to cool exposed surfaces. Avoid excessive water spray application.

Ratings	Health	Fire	Reactivity
NFPA	1	2	0
HMIS	1	2	0

### Unusual Fire and Explosion Hazards:

Combustible at low temperatures. Irritating or toxic substance may be emitted upon thermal decomposition. Never use welding or cutting torch on or near container (even empty).

**Firefighting Procedures:** Wear self-contained breathing apparatus with a full facepiece operated in the positive pressure demand mode when fighting fires.

## 5 Health Hazard Data

Threshold Limit Value	N/A
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**Effects of Acute Overexposure:** The health effects noted are consistent with requirements under OSHA Hazard Communication Standard (29 CFR 1910.1200).

- **Eye Contact:** May cause irritation.
- **Skin Contact:** May cause minimal irritation; prolonged contact may cause more severe irritation and/or dermatitis.
- **Inhalation:** Excessive inhalation of vapors can cause respiratory irritation, headache, dizziness, nausea and loss of coordination. Higher concentrations may cause loss of consciousness, cardiac sensitization, coma and death resulting from respiratory failure.
- **Ingestion:** Ingestion may result in nausea, vomiting, diarrhea and restlessness. Aspiration (breathing) of vomitus into the lungs must be avoided as even small quantities in the lungs can produce chemical pneumonitis and pulmonary edema/hemorrhage.

**Additional Toxicity Information:** Lifetime skin painting studies in animals with similar distillate fuels have produced weak carcinogenic activity following prolonged and repeated exposure. Repeated dermal application has produced severe irritation and systemic toxicity in subacute toxicity studies. Some components of distillate fuels, i.e., paraffins and olefins, have been shown to produce a species specific sex hormonal dependent kidney lesion in male rats from repeated oral or inhalation exposure.

Distillate fuels were found to be positive in a few mutagenicity tests while negative in the majority of others. The exact relationship between these results and human health is not known. Chronic human health effects would not be expected as long as good personal hygiene and proper safety precautions are practiced.

### First Aid:

- **Eye Contact:** Flush eyes with large amounts of water for at least 15 minutes. If symptoms or irritation occur, call a physician.
- **Skin Contact:** Wash with soap and large amounts of water. Remove contaminated clothing. If symptoms or irritation occur, call a physician.
- **Inhalation:** Move person to fresh air. If not breathing or if no heart beat, give artificial respiration or cardiopulmonary resuscitation (CPR). Immediately call a physician.
- **Ingestion:** Do not induce vomiting. Do not give liquids. Immediately call a physician.

**Primary Route (s) of Entry:** Inhalation, skin contact.

## 6 Reactivity Data

Hazardous Polymerization	Cannot occur
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Stability	Stable
Incompatibility	Avoid contact with strong oxidizing agents

## 7 Spill or Leak Procedures

Stop spill or leak at source. Eliminate all ignition sources. Contain spill if possible. Recover free liquid. Wipe up or absorb residual liquid on suitable absorbent material and transfer into container.

Prevent run-off to sewers, streams or other bodies of water. If run-off occurs, notify proper authorities as required that a spill has occurred. Liquid can be toxic to aquatic life. Contaminated absorbent material must be disposed of in accordance with local, state and federal regulations.

## 8 Protective Equipment

- **Eye Protection:** Wear safety glasses or chemical goggles to prevent eye contact.
- **Skin Protection:** Wear impervious gloves and protective clothing to prevent skin contact.
- **Respiratory Protection:** The use of a NIOSH/MSHA approved respirator is recommended.
- **Ventilation:** Use adequate ventilation to keep the airborne concentration of this material below recommended exposure level.

## 9 Special Precautions or Other Comments

Use appropriate grounding and bonding practices. Do not expose to heat, open flame or other sources of ignition. Containers when emptied still contain product residues. All hazard precautions given in this data sheet must be observed.

## 10 Transportation Requirements

DOT Proper Shipping Name	Fuel Oil No. 1
DOT Hazard Class	Combustible
DOT Identification Number	UN 1223

## 11 Other Regulatory Information

### SARA Title III Section 311 Hazard Categorization:

X	Acute		Pressure
	Chronic		Reactive
X	Fire		Not Applicable

**Comments:** The information contained herein is believed to be accurate, but it is not warranted to be whether originating within the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.

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