

Common Name: **KEROSENE**

Synonyms: Fuel Oil #1; Jet Fuel (Aviation Kerosene); Range Oil

CAS No: 8008-20-6

Molecular Formula: Varies

RTK Substance No: 1091

Description: Colorless to yellowish, oily liquid with a strong odor

## HAZARD DATA

Hazard Rating	Firefighting	Reactivity
<b>2 - Health</b> <b>2 - Fire</b> <b>0 - Reactivity</b>  <b>DOT#:</b> UN 1223 <b>ERG Guide #:</b> 128 <b>Hazard Class:</b> 3 (Flammable)	<b>COMBUSTIBLE</b> Use dry chemical, CO <sub>2</sub> , water spray or foam as extinguishing agents. Water may not be effective in fighting fires. <b>POISONOUS GASES ARE PRODUCED IN FIRE.</b> <b>CONTAINERS MAY EXPLODE IN FIRE.</b> Use water spray to keep fire-exposed containers cool. Vapor is heavier than air and may travel a distance to cause a fire or explosion far from the source. Flow or agitation may generate electrostatic charges. <b>Kerosene</b> may form an ignitable vapor/air mixture in closed tanks or containers.	<b>Kerosene</b> is not compatible with <b>OXIDIZING AGENTS</b> (such as <b>PERCHLORATES, PEROXIDES, PERMANGANATES, CHLORATES, NITRATES, CHLORINE, BROMINE</b> and <b>FLUORINE</b> ) and <b>NITRIC ACID</b> .

### SPILL/LEAKS

**Isolation Distance:**

**Spill:** 50 meters (150 feet)

**Fire:** 800 meters (1/2 mile)

Absorb liquids in dry sand, earth, or a similar material and place into sealed containers for disposal.

Use only non-sparking tools and equipment.

DO NOT wash into sewer.

**Kerosene** is dangerous to aquatic life at high concentrations.

### PHYSICAL PROPERTIES

<b>Odor Threshold:</b>	0.1 ppm
<b>Flash Point:</b>	100° to 162°F (38° to 72°C)
<b>LEL:</b>	0.7%
<b>UEL:</b>	5%
<b>Auto Ignition Temp:</b>	351° to 624°F (177° to 329°C)
<b>Vapor Density:</b>	4.5 (air = 1)
<b>Vapor Pressure:</b>	2 to 5 mm Hg at 68°F (20°C)
<b>Specific Gravity:</b>	0.81 to 0.95 (water = 1)
<b>Water Solubility:</b>	Insoluble
<b>Boiling Point:</b>	304° to 574°F (151° to 301°C)
<b>Freezing Point:</b>	-30°F (-34°C)
<b>Molecular Weight:</b>	170 (approximately)

### EXPOSURE LIMITS

**OSHA:** None

**NIOSH:** 100 mg/m<sup>3</sup>, 10-hr TWA

**ACGIH:** 200 mg/m<sup>3</sup>, 8-hr TWA

The Protective Action Criteria values are:

PAC-1 = 290 mg/m<sup>3</sup>    PAC-2 = 1,100 mg/m<sup>3</sup>

PAC-3 = 4,100 mg/m<sup>3</sup>

### PROTECTIVE EQUIPMENT

<b>Gloves:</b>	Nitrile, Viton, Viton/Butyl, Barrier® (>8-hr breakthrough)
<b>Coveralls:</b>	DuPont Tychem® F, BR, CSM and TK (>8-hr breakthrough) <b>Use turnout gear or flash protection if ignition/fire is the greatest hazard.</b>
<b>Respirator:</b>	>100 mg/m <sup>3</sup> - full-facepiece APR with <i>Organic vapor cartridge</i> >290 mg/m <sup>3</sup> or fire - SCBA

### HEALTH EFFECTS

<b>Eyes:</b>	Irritation
<b>Skin:</b>	Irritation
<b>Inhalation:</b>	Nose and throat irritation with coughing and wheezing  Headache, dizziness, nausea and vomiting, weakness, restlessness, disorientation and drowsiness  Convulsions and coma may follow very high exposure

### FIRST AID AND DECONTAMINATION

**Remove** the person from exposure.  
**Flush** eyes with large amounts of water for at least 15 minutes. Remove contact lenses.  
**Quickly** remove contaminated clothing and wash contaminated skin with large amounts of soap and water.  
**Begin** artificial respiration if breathing has stopped and CPR if necessary.  
**Transfer** promptly to a medical facility.