

# MATERIAL SAFETY DATA SHEET

MSDS File Number: 106

<b>SECTION I - MATERIAL IDENTIFICATION AND USE</b>		Item #590125.	<b>FLAMMABILITY</b>	<b>2</b>	
Material Name / Product Identifier <b>KEROSENE</b>			<b>REACTIVITY</b>	<b>0</b>	
Manufacturer's Name <b>Imperial Oil; Chemicals Division 111 St. Clair Avenue West Toronto, ON M5W 1K3 (416) 968-4415</b>		Supplier's Name <b>Federated Co-operatives Limited P. O. Box 1050; 401 - 22nd Street East Saskatoon, SK S7K 3M9 Canada (306) 244-3447</b>		<b>HEALTH (Acute)</b>	<b>2</b>
Emergency Telephone Number <b>(519) 339-2145 -Emergency</b>		Emergency Telephone Number <b>(613) 996-6666 (Canutec)</b>		<b>(Chronic)</b>	<b>Y</b>
Mfg Reference Number <b>MSDS# 09160.</b>					
Chemical Name <b>Aliphatic Hydrocarbon</b>		Chemical Family <b>Petroleum Hydrocarbon</b>		Chemical Formula <b>Mixture.</b>	
Molecular Weight <b>145</b>	Trade Name and Synonyms <b>KERO 1-K</b>	Material Use <b>Heating and illuminating oil.</b>			

## SECTION II - HAZARDOUS INGREDIENTS OF MATERIALS

Hazardous Ingredients	Approximate Concentration %	C.A.S. Numbers	Exposure Limits	LD50 / LC 50 (Species and Route)
Stoddard solvent	60.0 - 100.0 %	8052-41-3	(ACGIH) TLV-TWA 100 ppm	(LD50) Oral (rat) >5 g/kg; (LC50) Inhalation (rat) >5 g/m3
Light distillate-Hydrotreated	15.0 - 40.0 %	64742-47-8		(LD50) Oral (rat) > 5g/kg; (LD50) Dermal (rabbit) >3 g/kg

## SECTION III - PHYSICAL DATA FOR MATERIAL

Physical State <b>Liquid</b>	Odour and Appearance <b>Clear, colorless; Mild petroleum odor</b>	Odour Threshold (ppm) <b>N.D.</b>	Specific Gravity <b>0.8 @ 15C</b>
Vapour Pressure <b>0.224 kPa @ 20 C</b>	Vapor Density (Air = 1) <b>5</b>	Evaporation Rate <b>0.1 (n-butyl acetate=1)</b>	Boiling Point <b>164-203 C</b>
Solubility in Water (20 C) <b>negligible</b>	% Volatiles <b>100</b>	pH <b>N/A</b>	Freezing / Pour Point <b>&lt; -54 C</b>
		Coefficient of water / oil distribution <b>N.D.</b>	

## SECTION IV - FIRE AND EXPLOSION HAZARD OF MATERIAL

Conditions of Flammability <b>Combustible liquid; may form combustible mixtures at or above the flashpoint. Toxic gases will form upon combustion.</b>			
Means of Extinction <b>Use dry chemical, foam, or water spray to extinguish fire. Use water spray to cool fire exposed surfaces and to protect personnel.</b>			
Special Procedures <b>Fire fighters should wear self contained breathing apparatus and full protective clothing. Avoid spraying water directly into storage container due to the danger of boilover. Shut off fuel to fire when/if safe to do so.</b>			
Flash Point and Method <b>47 C (Closed Cup)</b>	Upper Explosion Limit <b>6</b>	Lower Explosion Limit <b>1.1</b>	Auto Ignition Temperature <b>227 C</b>
Explosion Data - Sensitivity to Mechanical Impact <b>N.D.</b>		Explosion Data - Sensitivity to Static Discharge <b>Can be ignited by static discharge.</b>	

## SECTION V - REACTIVITY DATA

Chemical Stability <b>Yes.</b>	If no, under which conditions?	<b>Stable under normal conditions of use and storage. Use product with caution around heat, sparks, pilot lights, static electricity and open flames.</b>
Incompatibility to other substances <b>Yes.</b>	If so, which ones?	<b>Strong oxidizing agents.</b>
Reactivity and under what conditions <b>Hazardous polymerization will not occur.</b>		
Hazardous Decomposition and Combustion Products <b>Combustion Products: Smoke, carbon monoxide, fumes.</b>		



Material Name / Product Identifier **KEROSENE**

## SECTION VI - TOXICOLOGICAL PROPERTIES OF PRODUCT

Route of Entry **Skin Contact, Eye Contact, Inhalation, Ingestion.**

Effects of Acute Exposure to Product

**High vapour/aerosol concentrations attained at elevated temperatures are irritating to the eyes, nose, throat and lungs; may cause headaches and dizziness; may be anesthetic and may cause other central nervous system effects. Eye: slightly irritating, but will not injure eye tissue. Skin: low toxicity. Ingestion: low toxicity. Small amounts of this liquid drawn into the lungs from swallowing or vomiting may cause severe health effects.**

Effects of Chronic Exposure to Product

**High exposure to xylenes in some animal studies have been reported to cause health effects on the developing embryo/fetus. Those effects were often at levels toxic to the mother. The significance of these findings to humans has not been determined.**

LD50 of Product <b>See 'Hazardous Ingredients'.</b>	Irritancy of Product <b>Yes.</b>	Exposure Limits of Product <b>See 'Hazardous Ingredients'.</b>
LC50 of Product <b>See 'Hazardous Ingredients'.</b>	Sensitization to Product <b>N.D.</b>	Synergistic materials <b>N.D.</b>

**OTHER TOXICOLOGICAL EFFECTS: Carcinogenicity.**

**This product contains Naphthalene and the International Association on the Research of Cancer (IARC) has classified this product as Group 2B - possible a Human carcinogen.**

## SECTION VII - PREVENTATIVE MEASURES

Personal Protective Equipment

**Wear suitable protective clothing to prevent skin contact.**

Gloves <b>Chemical resistant.</b>	Eye Protection <b>Safety glasses with side shields or chemical goggles.</b>
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Respiratory  
**Not normally required if used with adequate ventilation. Wear an appropriate NIOSH approved respirator if concentration levels exceed the safe exposure limits. If exposure levels are not known, wear an air supplied respirator (SCBA).**

Engineering Controls

**Use with local exhaust ventilation is recommended to control emissions near the source. Lab samples should be handled under a fumehood. Provide mechanical ventilation of confined spaces.**

Leak and Spill Procedure

**Eliminate source of ignition. Prevent additional discharge of material, if possible to do so without hazard. Prevent spills from entering sewers, watercourses or low areas. Contain spilled liquid with sand or earth. Do not use combustible materials such as sawdust. Recover by pumping (use an explosion proof motor or hand pump) or by using a suitable absorbent.**

Waste Disposal

**Dispose of according to all government regulations.**

Handling Procedures and Equipment

**Do not handle or store near heat or ignition sources. Protect material from direct sunlight. Material will accumulate static charges which may cause an electrical spark (ignition source). Use proper grounding and bonding procedures. Wash thoroughly after handling. Launder contaminated clothing before reuse. Do not pressurize, cut, heat or weld containers. Empty containers may contain hazardous product residue. Do not reuse empty containers without commercial cleaning.**

Storage Requirements

**Store in a cool, well ventilated area, out of direct sunlight, away from incompatible materials and ignition sources. Keep container closed when not in use.**

Special Shipping Information

**TDG: PETROLEUM DISTILLATES, N.O.S., Class 3, UN1268, PGIII. (Containers of 454 litres capacity or less this product exempt from TDG regulations).**

## SECTION VIII - FIRST AID MEASURES

Skin

**Immediately flush with large amounts of water. Use soap if available. Remove contaminated clothing, including shoes, after flushing has begun. Seek medical attention if irritation develops or persists.**

Eye

**Flush eyes with large amounts of water until irritation subsides. If irritation persists, get medical attention.**

Inhalation

**Remove to fresh air. In emergency situations, use proper respiratory protection to remove the victim to fresh air. If not breathing, give artificial respiration. Keep at rest. Seek immediate medical attention.**

Ingestion

**DO NOT INDUCE VOMITING! Keep at rest. Get prompt medical attention.**

General Advice

## SECTION IX - PREPARATION OF M.S.D.S

W.H.M.I.S. Classification <b>B-3, D-2(B).</b>	N.F.C. Classification
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Sources Used

**Imperial Oil (this MSDS is on file and is available for your viewing).**

Prepared By <b>CCRL Safety Department</b>	Phone Number <b>(306) 721-0564</b>	Date <b>April 1, 2008</b>
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