

# Boss Lubricants: Material Safety Data Sheet

Date Prepared: January 1, 2012

## 1. Product Information

Product Identifier: KEROSENE

Application and Use:  
Light, low sulphur, clean burning distillate fuel for heaters and wick lamps.

Product Description:  
Aliphatic hydrocarbon

CAS number: 8052-41-3

## Regulatory Classification

### WHMIS:

Class B, Division 3: Combustible liquids

### TDG INFORMATION ( RAIL/ROAD )

Shipping Name : Naphtha, solvent

Class: 3

Packing Group: III

PIN Number: UN 1223

Canadian Environmental Protection Act (CEPA)

All components of this product are either on the Domestic Substances List (DSL) or exempt.

National Pollutant Release Inventory (NPRI):

This product contains the following NPRI reportable substances:

Component:	CAS #	Approx. %
1,2,4 – Trimethylbenzene	95-63-6	4.2

Please be aware that other regulations may apply.

## 2. Regulated Components

The following component data is defined in accordance with sub-paragraph 13(a)(I) to (iv) or paragraph 14(a) of the Hazardous products Act :

Name	% (V/V)	CAS #
Kerosene, straight run	100	8008-20-6

## 3. TYPICAL PHYSICAL & CHEMICAL PROPERTIES

Physical State:	Liquid
Specific gravity:	0.40
Viscosity:	0.80 to 1.50 cSt at 25 deg. C
Vapour Density (AIR=1):	4.5
Boiling Point:	130 to 290 deg C
Evaporation rate:	0.1 Approximately
Solubility in water:	Negligible
Freezing/Pour Point:	-50 to -39 deg C (D97)
Odour Threshold:	Not available

Vapour Pressure:	<1 kPa at 38 deg C Approximate
% Volatile:	Greater than 38 deg
Appearance/Odour:	Clear, colorless liquid
Density:	790 to 120 g/l at 15 deg C

## 4. Health Hazard Information

### Nature of Hazard

#### Inhalation:

High vapour / aerosol concentrations (greater than approximately 1000 ppm) are irritating to the eyes and the respiratory track and may cause headaches, dizziness, anesthesia, unconsciousness and other central nervous system effects including death.

#### Eye Contact:

Slightly irritating, but will not injure eye tissue.

#### Skin Contact

Low toxicity:

Frequent or prolonged contact may irritate the skin and cause a skin rash (dermatitis).

Skin contact may aggravate an existing dermatitis condition.

#### Ingestion:

Minimal toxicity.

Small amounts of liquid aspirated into the respiratory system during ingestion or from vomiting may cause mild to severe pulmonary injury and possible death.

#### Chronic:

This product contains ethylbenzene. A draft report on a study conducted by the National Toxicology program states that lifetime inhalation exposure of rats and mice to concentrations of ethylbenzene (750 ppm) resulted in increases in certain types of cancer, including kidney tumors in rats and lung and liver tumors in mice. These effects were not observed in animals exposed to lower concentrations of ethylbenzene (75 ppm or 250 ppm). The draft report does not address the relevance of these results to humans. High exposures to xylenes in some animal studies have been reported to cause health effects on the developing embryo/fetus. These effects were often at levels toxic to the mother. The significance of these findings to humans has not been determined.

#### Special Health Precautions:

Health studies have shown that many petroleum hydrocarbons pose potential human health risks which may vary from person to person. As a precaution, exposure to liquids, vapours, mists or fumes should be minimized.

#### Occupational Exposure Limit:

##### ACGIH recommends:

For Trimethylbenzene, 25ppm (123 mg/m3).

For Stoddard Solvent, 100 ppm (525 mg/m3).

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**Manufacturer Recommends:**  
100 ppm based on composition.  
Local regulated limits may vary.

## 5. First Aid Measures

### Inhalation:

In emergency situations use proper respiratory protection to immediately remove the affected victim from exposure. Administer artificial respiration if breathing has stopped. Keep at rest. Call for prompt medical attention.

### Eye Contact:

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

### Skin Contact:

Immediately flush with large amounts of water. Use soap if available. Remove contaminated clothing (including shoes) after flushing has begun.

### Ingestion:

If swallowed, DO NOT induce vomiting. Keep at rest. Get prompt medical attention.

## 6. Preventive and Corrective Measures

### Personal Protection:

The selection of personal protective equipment varies, depending upon conditions of use. Where prolonged and/or repeated skin and eye contact is likely to occur, wear safety glasses with side shields, long sleeves, and chemical resistant gloves. In open systems where contact is likely, wear safety goggles, chemical-resistant overalls, and chemically impervious gloves. Where only incidental contact is likely, wear glasses with side shields. No other special precautions are necessary provided skin/eye contact is avoided. Where concentrations in air may exceed the occupational exposure limits given in Section 4 and where engineering, work practices or other means of exposure reduction are not adequate, approved reduction may be necessary to prevent overexposure by inhalation.

### Engineering Controls:

The use of local exhaust ventilation is recommended to control emissions near the source. Laboratory samples should be handled in a lab hood. Provide mechanical ventilation of confined spaces.

### Electrostatic Accumulation Hazard:

Yes, use proper ground procedure.  
Additional information regarding safe handling of products with static accumulation potential can be ordered by contacting the American Petroleum Institute (API) for API Recommended Practice 2003, entitled "Protection Against Ignitions Arising Out of Static, Lighting and Stray Currents" (American Petroleum Institute, 1220 L Street

Northwest, Washington, D.C. 2005), or the National Fire Protection Association (NFPA) for NFPA 77 entitled "Static Electricity" (National Fire Protection Agency, 1 Batterymarch Park, P.O. Box 9101, Quincy, MA. 02269-9101).

### Handling, Storage and Shipping:

Keep containers closed. Handle and open containers with care. Store in a cool, well ventilated place away from incompatible materials. Do not handle or store near an open flame, sources of heat, or sources of ignition. Empty containers may contain product residue. Do not pressurize cut, heat, or weld empty containers. Do not reuse empty containers without commercial cleaning or reconditioning.

### Spill Control and Disposal:

Consult an expert on the disposal of recovered material. Ensure disposal is in compliance with government requirements and ensure conformity to local disposal regulations. Notify the appropriate authorities immediately. Take all additional action necessary to prevent and remedy the adverse effects of the spill.

### Land Spill:

Eliminate source of ignition. Keep public away. 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. Recover by pumping or by using a suitable absorbent. Consult an expert on disposal of recovered material. Ensure disposal in compliance with government requirements and ensure conformity to local disposal regulations. Notify the appropriate authorities immediately. Take all additional action necessary to prevent and remedy the adverse

### Water spill:

Eliminate sources of ignition. Warn occupants and shipping in surrounding and downwind areas of fire and explosion hazard and request all to stay clear. Remove from surface by skimming or with suitable absorbents. If allowed by local authorities and environmental agencies, sinking and/or suitable dispersants may be used in unconfined waters. Consult and expert on disposal of recovered material. Ensure disposal in compliance with government requirements and ensure conformity to local disposal regulations. Notify the appropriate authorities immediately. Take all additional action necessary to prevent and remedy the adverse effects of the spill.

## 7. Fire and Explosion Hazard

Flashpoint and Method: 43 deg C TCC Typical  
Autoignition Temperature: 229 deg C Approximate  
Flamable Limits: 1 to 13.3% by Volume Approximate

### General Hazards:

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Combustible Liquid; may form combustible mixtures at or above the flash point.

Toxic gases will form upon combustion.

## Fire Fighting:

Use water spray to cool fire exposed surfaces and to protect personnel. Shut off fuel to fire. Use foam, dry chemical or water spray to extinguish fire. Respiratory and eye protection required for fire fighting personnel. Avoid spraying water directly into storage containers due to danger of boil over. A self-contained breathing apparatus (SCBA) should be recommended for all indoor fires and any significant outdoor fires. For small outdoor fires, which may easily be extinguished with a portable fire extinguisher, use of a SCBA is optional.

## Hazardous Combustion Products;

None

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## 8. Reactivity Data

### General:

This product is stable and hazardous polymerization will not occur.

### Incompatible materials and conditions to avoid:

Strong oxidizing agents

### Hazardous Decomposition:

None.

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## 9. Notes

In containers of 454 litres capacity or less, this product is exempt from TDG regulations.

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## 10. Preparation

Date Prepared: March 28, 2006

Prepared by: Technical Services

Boss Lubricants

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### CAUTION:

The information contained herein relates only to this product or material and may not be valid when used in combination with any other product or material or in any process. If the product is not to be used for a purpose or under conditions which are normal or reasonably foreseeable, this information cannot be relied upon as complete or applicable. For greater certainty, uses other than those described in Section 1 must be reviewed with supplier. The information contained herein is based on the information available at the indicated date of preparation.