Imperial Oil

MATERIAL SAFETY DATA SHEET

Date Prepared: November 10, 2005
Supersedes: November 06, 2002
MSDS Number: 3834

1. PRODUCT INFORMATION

Product Identifier: AVIATION GASOLINE 100LL
ESSO AVIATION GASOLINE 100LL

Application and Use:
Aviation fuel.

Product Description:

A mixture of aliphatic and aromatic hydrocarbons and additives.

REGULATORY CLASSIFICATION

WHMIS:
Class B, Division 2: Flammable Liquids.
Class D, Division 2, Subdivision B: Toxic Material

CEPA: CANADIAN ENVIRONMENTAL PROTECTION ACT
All components of this product are either on the Domestic Substances List (DSL) or are exempt.

TDG INFORMATION (RAIL/ROAD):

Shipping Name: Gasoline
Class: 3
Packing Group: II
PIN Number: UN1203
Marine Pollutant:P

Please be aware that other regulations may apply.

TELEPHONE NUMBERS

Emergency 24 hr. (519) 339-2145
Technical Info. (800) 268-3183

MANUFACTURER/SUPPLIER:

IMPERIAL OIL
Products Division
240 4th Avenue S.W.

Calgary, Alberta
T2P 3M9

2. REGULATED COMPONENTS

The following components are defined in accordance with sub-paragraph 13(a)(i) to (iv) or paragraph 14(a) of the Hazardous Products Act:

NAME	%	CAS #	
Naphtha (petroleum), light alkylate	70-100 V/V	64741-66-8.	
Toluene	0-30 V/V	108-88-3	LD50:>2g/kg,skn,rbt LC50:8000ppm rat

3. TYPICAL PHYSICAL & CHEMICAL PROPERTIES

Physical State: Liquid
Specific gravity: not available
Viscosity: 0.60 cSt at 20 deg C
Vapour Density: 4
Boiling Point: 70 to 170 deg C
Evaporation rate: >1 (1= n-butylacetate)
Solubility in water: negligible
Freezing/Pour Point: -58 deg C
Odour Threshold: not available
Vapour Pressure: 38 kPa to 48 kPa at 38 deg C
Density: 0.71 g/cc at 15 deg C
Appearance/odour: Clear blue liquid, pungent petroleum odour.

4. HEALTH HAZARD INFORMATION

NATURE OF HAZARD

INHALATION:

High vapour concentrations 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.
Avoid breathing vapours or mists.

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).

INGESTION:

Low toxicity.
Small amounts of this liquid drawn into the lungs from swallowing or vomiting may cause severe health effects (e.g. bronchopneumonia or pulmonary edema).

CHRONIC:

Contains n-hexane. Prolonged and/or repeated exposures may cause damage to the peripheral nervous system (e.g. fingers, feet, arms etc.).

ACUTE TOXICITY DATA:

Based on animal testing data from similar materials and products, the acute toxicity of this product is expected to be:
Oral : LD50 > 18 ml/kg (Rat)
Dermal : LD50 > 5 ml/kg (Rabbit)

OCCUPATIONAL EXPOSURE LIMIT:

Manufacturer Recommends:
For gasoline, 100 ppm (300 mg/m3).

ACGIH recommends:
For n-Hexane (skin), 50 ppm (176 mg/m3).
For Toluene (skin), 50 ppm (188 mg/m3).

Local regulated limits may vary.

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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:

Flush with large amounts of water. Use soap if available.
Remove severely contaminated clothing (including shoes) and launder before reuse.
If irritation persists, seek medical attention.

INGESTION:

DO NOT induce vomiting since it is important that no amount of the material should enter the lungs (aspiration). Keep at rest. Get prompt medical attention.

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6. PREVENTIVE AND CORRECTIVE MEASURES

PERSONAL PROTECTION:

The selection of personal protective equipment varies, depending upon conditions of use.
In open systems where contact is likely, wear safety goggles, chemical-resistant overalls, and chemically impervious gloves.
Where only incidental contact is likely, wear safety 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 respirators 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 fumehood. Provide mechanical ventilation of confined spaces.
Use explosion-proof ventilation equipment.

HANDLING, STORAGE AND SHIPPING:

Store in a cool, well ventilated place away from incompatible materials.
In keeping with good personal hygiene practices, wash hands thoroughly after handling the material.
Material will accumulate static charges which may cause a spark. Static charge build-up could become an ignition source. Use proper relaxation and grounding procedures.
Store and load at normal (up to 38 deg C) temperature and at atmospheric pressure.
For personnel entry into confined spaces (i.e. bulk storage tanks) a proper confined space entry procedure must be followed including ventilation and testing of tank atmosphere.
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.

LAND SPILL:

Eliminate source of ignition. Keep public away. Prevent additional discharge of material, if possible to do so without hazard.
Vapours or dust may be harmful or fatal. Warn occupants of downwind areas.

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.
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 effects of the spill.

WATER SPILL:

Eliminate all sources of ignition. Vapours or dust may be harmful or fatal. Warn occupants and shipping in downwind areas.
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 effects of the spill.

7. FIRE AND EXPLOSION HAZARD

Flashpoint and method: -42 deg C TCC ASTM D56

Autoignition: 439 deg C Flammable Limits: LEL: 1.4% UEL: 7.6%

GENERAL HAZARDS:

Extremely flammable; material will readily ignite at normal temperatures.
Flammable Liquid; may release vapours that form flammable mixtures at or above the flash point.
Decomposes; flammable/toxic gases will form at elevated temperatures (thermal decomposition).
Toxic gases will form upon combustion.
Static Discharge; material may accumulate static charges which may cause a fire.

FIRE FIGHTING:

Use water spray to cool fire exposed surfaces and to protect personnel.
Shut off fuel to fire if possible to do so without hazard. If a leak or spill has not ignited use water spray to disperse the vapours.
Either allow fire to burn out under controlled conditions or extinguish with foam or dry chemical. Try to cover liquid spills with foam.
Respiratory and eye protection required for fire fighting personnel.
Avoid spraying water directly into storage containers due to danger of boilover.
A self-contained breathing apparatus (SCBA) should be used 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 an SCBA may not be required.

HAZARDOUS COMBUSTION PRODUCTS:

Fumes, smoke, carbon monoxide, sulfur oxides, aldehydes and other decomposition products, in the case of incomplete combustion.

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8. REACTIVITY DATA

STABILITY:

This product is stable. Hazardous polymerization will not occur.

INCOMPATIBLE MATERIALS AND CONDITIONS TO AVOID:

Strong oxidizing agents. Use product with caution around heat, sparks, pilo lights, static electricity and open flames.

HAZARDOUS DECOMPOSITION:

Fumes, smoke, carbon monoxide, sulfur oxides, aldehydes and other decomposition products, in the case of incomplete combustion.

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9. NOTES

All components of this product are listed on the U.S. TSCA inventory.

REVISED.

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10. PREPARATION

Date Prepared: November 10, 2005
Prepared by: Lubricants & Specialties
IMPERIAL OIL
Products Division
240 4th Avenue S.W.
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