

**IMPERIAL OIL  
MATERIAL SAFETY DATA SHEET****UNLEADED GASOLINE**

Date Prepared: March 19, 2003  
Supersedes: November 06, 2002  
MSDS Number: 08522

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**1. PRODUCT INFORMATION**

Product Identifier: UNLEADED GASOLINE  
REGULAR UNLEADED  
MIDGRADE UNLEADED  
ESSO SUPER PREMIUM UNLEADED  
PREMIUM UNLEADED  
ESSO REGULAR UNLEADED  
ESSO MIDGRADE UNLEADED  
ESSO EXTRA MIDGRADE UNLEADED  
ESSO PREMIUM UNLEADED  
EXXON MIDGRADE UNLEADED  
EXXON PREMIUM UNLEADED  
INDOLENE GASOLINE  
EXXON REGULAR UNLEADED  
PREMIUM GASOLINE  
ESSO EXTRA MIDGRADE GASOLINE  
MIDGRADE GASOLINE  
GASOLINE REGULAR UNLEADED  
GASOLINE MIDGRADE UNLEADED MUL89 (DYED OR CLEAR)  
GASOLINE REGULAR UNLEADED RUL87 (DYED OR CLEAR)  
GASOLINE PREMIUM UNLEADED PUL91 (DYED OR CLEAR)  
GASOLINE PREMIUM UNLEADED PUL92 (DYED OR CLEAR)  
GASOLINE PREMIUM UNLEADED SUL94  
SUPERSUPREME 94 PREMIUM UNLEADED GASOLINE-MTBE  
GASOLINE MIDGRADE UNLEADED MUL89 (P91/R87)  
GASOLINE MIDGRADE UNLEADED MUL89 DCA (P92/R87)  
REGULAR UNLEADED  
MIDGRADE UNLEADED  
ESSO SUPER PREMIUM UNLEADED  
PREMIUM UNLEADED  
ESSO REGULAR UNLEADED  
ESSO MIDGRADE UNLEADED  
ESSO EXTRA MIDGRADE UNLEADED  
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GASOLINE PREMIUM UNLEADED PUL92 (DYED OR CLEAR)  
GASOLINE PREMIUM UNLEADED SUL94  
SUPERSUPREME 94 PREMIUM UNLEADED GASOLINE-MTBE  
GASOLINE MIDGRADE UNLEADED MUL89 (P91/R87)  
GASOLINE MIDGRADE UNLEADED MUL89 DCA (P92/R87)

Application and Use:  
Motor gasoline fuel, for use in internal combustion engines only

## Product Description:

A mixture of aliphatic and aromatic hydrocarbons and additives.

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## REGULATORY CLASSIFICATION

## WHMIS:

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

## 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  
111 St Clair Avenue West  
Toronto, Ontario  
M5W 1K3  
(416) 968-4441

**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 #	
Gasoline	>99 V/V	8006-61-9	LD50>18ml/kg, orl, rat LD50> 5ml/kg, skn, rbt
Methyl T-Butyl Ether	0-15 V/V	1634-04-4	LD50:3.9g/Kg, ing, rat LD50:>10g/Kg, skn, rbt LC50:142Mg/L, inh, rat

**3. TYPICAL PHYSICAL & CHEMICAL PROPERTIES**

Physical State: Liquid  
Specific gravity: not available  
Viscosity: 0.80 cSt at 20 deg C  
Vapour Density: 3.2  
Boiling Point: 35 to 210 deg C  
Evaporation rate: >10 (1= n-butylacetate)  
Solubility in water: negligible  
Freezing/Pour Point: -60 deg C less than  
Odour Threshold: not available  
Vapour Pressure: 76 kPa to 103 kPa at 38 deg C  
Density: 0.73 g/cc at 15 deg C  
Appearance/odour: Naturally occurring water white or pale yellow;  
may be dyed a variety of colours for tax or other  
purposes; 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:**

The International Agency for Research on Cancer (IARC) has evaluated gasoline and found it to be a possible human carcinogen. Contains benzene. Human health studies (epidemiology) indicate that prolonged and/or repeated overexposures to benzene may cause damage to the blood producing system and serious blood disorders, including leukemia. Animal tests suggest that prolonged and/or repeated overexposures to benzene may damage the embryo/fetus. The relationship of these animal studies to humans has not been fully established. Contains n-hexane. Prolonged and/or repeated exposures may cause damage to the peripheral nervous system (e.g. fingers, feet, arms etc.). Methyl Tertiary Butyl Ether (MTBE) was tested for carcinogenicity, neurotoxicity, chronic, reproductive and developmental toxicity. The NOEL for all endpoints evaluated in three animal species was 400 ppm or greater. An increase in kidney tumors/damage and liver tumors was observed in animals exposed to high concentrations of MTBE. Some embryo/fetal toxicity and birth defects were observed in the offspring of pregnant mice exposed to maternally toxic doses of MTBE, however the offspring of exposed pregnant rabbits were unaffected. The significance of the animal findings at high exposures are not believed to be directly related to potential human health hazards in the workplace.

**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, 300 mg/m3.  
For Methyl-tert-Butyl Ether, 25 ppm (90 mg/m3) 8-hour TWA and 75 ppm (270 mg/m3) 15-minute STEL.

**ACGIH recommends:**

For Gasoline, ACGIH recommends a TWA of 300 ppm (890 mg/m3) and categorizes it as an animal carcinogen.  
For n-Hexane (skin), 50 ppm (176 mg/m3).  
For Benzene, ACGIH recommends a TWA of 0.5 ppm (1.6 mg/m3), (skin), and categorizes it as a confirmed human carcinogen.  
For Methyl-tert-Butyl Ether, ACGIH recommends a TLV of 40 ppm (144 mg/m3) and categorizes it as an animal carcinogen.

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:**

Keep containers closed. Handle and open containers with care. In keeping with good personal hygiene practices, wash hands thoroughly after handling the material.

Store and load at normal (up to 38 deg C) temperature and at atmospheric pressure. 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. 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.

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## 7. FIRE AND EXPLOSION HAZARD

Flashpoint and method: -40 deg C COC D92 less than/moins de

Autoignition: NA 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.

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:

Smoke, carbon monoxide, carbon dioxide under thermal decomposition.

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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

#### HAZARDOUS DECOMPOSITION:

none

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**9. NOTES**

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

**REVISION SUMMARY:**

Since 6 November 2002, this MSDS has been revised in Section(s):

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**10. PREPARATION**

Date Prepared: March 19, 2003  
Prepared by: Lubricants & Specialties  
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