

Gas-Unleaded

IMPERIAL OIL: GAS - UNLEADED

SIGNS & SYMPTOMS OF EXPOSURE

- **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
- **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).

FIRST AID

Emergency 24 hr. (519) 339-2145 IMPERIAL OIL

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.

PRODUCT MONOGRAM

IMPERIAL OIL: GAS - UNLEADED

MSDS Safety Information

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 the supplier. The information contained herein is based on the information available at the indicated date of preparation. This MSDS is for the use of Imperial Oil customers and their employees and agents only. Any further distribution of this MSDS by Imperial Oil customers is prohibited without the written consent of Imperial Oil."

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

Ingredients

A mixture of aliphatic and aromatic hydrocarbons and additives

Gasoline >99 V/V 8006-61-9 LD50>18ml/kg,orl,rat LD50>

Contractor Summary

Emergency 24 hr. (519) 339-2145 IMPERIAL OIL
Technical Info. (800) 268-3183 Products Division
111 St Clair Avenue West
Toronto, Ontario
M5W 1K3

(416) 968-4441 CEPA: CANADIAN ENVIRONMENTAL
PROTECTION ACT

All components of this product are either on the Domestic
Substances
List (DSL), exempt, or have been notified under Section 26 of
CEPA.

DG INFORMATION (RAIL/ROAD)

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

Physical/Chemical Properties

Physical State: Liquid Specific gravity: not available
Viscosity: 0.80 cSt at 20 deg C
Vapour Density: 3.2 Boiling Point: 25 to 210 deg C

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

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.
LC50: 142Mg/L, inh, rat

Health Hazards Data

INHALATION:

High vapour concentrations are irritating to the eyes, nose, throat and lungs; may cause headache 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 Benzene (skin) 1 ppm TWA for 8 hour workday. 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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Handling and Disposal

DG INFORMATION (RAIL/ROAD):

Shipping Name: Gasoline

Class: 3

Packing Group: II

PIN Number: UN1203

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.

Fire and Explosion Hazard Information

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.

REACTIVITY DATA

STABILITY: This product is stable. Hazardous polymerization will not occur.

INCOMPATIBLE MATERIALS AND CONDITIONS TO AVOID: Strong oxidizing agents

HAZARDOUS DECOMPOSITION:

none

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.