



MATERIAL SAFETY DATA SHEET

SECTION I - PRODUCT IDENTIFICATION

Product Name: CBOB Gasoline (No ethanol)
Product Use: Fuel
WHMIS Class: Class B - Division 2 - Flammable Liquid, Class D - Division 2A, 2B
DOT Classification: Gasoline; Class 3; UN1203; PGII
TDG Classification: GASOLINE; Class 3; UN1203; PGII
Manufacturer/Supplier: Irving Oil Refining G.P.
Box 1260
Saint John, NB E2L 4H6 CA
Phone: (506) 202-2000
Refinery: (506) 202-3000
Emergency Phone: 1-800-424-9300 (CHEMTREC)

LEGEND HMIS/NFPA		Health	* 1
Severe	4	Flammability	4
Serious	3	Physical Hazard	0
Moderate	2	Personal Protection	B
Slight	1		
Minimal	0		



SECTION II - HAZARDOUS INGREDIENTS

<u>Ingredient(s)</u>	<u>CAS #</u>	<u>Wt%</u>	<u>OSHA PELS</u>	<u>ACGIH-TLV</u>	<u>LC50</u>	<u>Oral LD50</u>
Gasoline	8006-61-9	60 - 100	Not established	Not established	Not available	13600 mg/kg rat
Toluene	108-88-3	5 - 10	200 ppm - TWA; 300 ppm - CEIL	20 ppm - TWA; ; 50 ppm - MIST	12.5 mg/l/4h rat	636 mg/kg rat
Xylene	1330-20-7	5 - 10	100 ppm - TWA	100 ppm - TWA; 150 ppm - STEL	6350 mg/l/4h rat	4300 mg/kg rat
N-Hexane	110-54-3	1 - 5	500 ppm - TWA	50 ppm - TWA; 1000 ppm - STEL	38500 mg/l/4h rat	28710 mg/kg rat
Benzene	71-43-2	0.1 - 1	1 ppm - TWA; 5 ppm - STEL; 25 ppm - CEIL	0.5 ppm - TWA; 2.5 ppm - STEL	13050 ppm rat; 13700 mg/l/4h rat	690 mg/kg rat; 4700 mg/kg mouse

*Contains a variety of aromatic and aliphatic hydrocarbons including: benzene, n-hexane, toluene and xylene
Gasoline is a complex mixture of hydrocarbons. Its exact composition depends on the source of the crude oil from which it was produced and the refining methods used. Gasoline contains hundreds of individual organic chemicals. This section identifies only some of the well-known chemical constituents.

SECTION III - PHYSICAL DATA

Boiling Point:	27 - 220 °C (80.60 - 428.00 °F)	Specific Gravity:	0.73 - 0.75 @ 15°C
Freezing Point:	< -80 °C (< -112.00 °F)	Coefficient of Water/Oil Distribution:	Not available
Vapor Pressure:	150 - 500 mmHg @ 20°C	% Volatile:	Not available
Vapor Density:	2.5 - 4 (air = 1)	Evaporation Rate:	4 (butyl acetate = 1)
Solubility in Water:	Not available	pH:	Not applicable
Physical State:	Liquid	Viscosity:	Not available
Appearance:	Clear Liquid	Odor Threshold:	~ 0.1 ppm
Odor:	Characteristic Gasoline		

SECTION IV - FIRE AND EXPLOSION DATA

Flammability: Flammable by WHMIS/OSHA criteria.
Flash Point (Closed Cup): -43 °C (-45.40 °F) **LEL:** 1.4 % (Typical) **UEL:** 7.6 % (Typical)
Hazardous Combustion Products: May include and are not limited to: Oxides of carbon. Oxides of nitrogen. Aromatic and aliphatic hydrocarbons
Autoignition Temperature: 257 °C (494.60 °F) (Typical)
Explosion Data:
Sensitivity to Mechanical Impact: Not expected to be sensitive to mechanical impact.
Sensitivity to Static Discharge: Vapor: Yes.
Means of Extinction: Carbon dioxide. Dry chemical. Foam.
Special Fire Hazards: Firefighters should wear a self-contained breathing apparatus. Container may explode in heat of fire. Vapors are heavier than air and may travel along the ground to some distant source of ignition and flash back.

SECTION V - REACTIVITY DATA

Conditions for Chemical Instability:	Stable under recommended storage conditions.
Incompatible Materials:	Acids. Oxidizers.
Reactivity, and Under What Conditions:	Heat, open flames, static discharge, sparks and other ignition sources. Do not mix with other chemicals.
Hazardous Decomposition Products:	May include and are not limited to: Oxides of carbon. Oxides of nitrogen. Aromatic hydrocarbons.

SECTION VI - TOXICOLOGICAL PROPERTIES

Route of Entry: Eye, Skin contact, Skin absorption, Inhalation, Ingestion.

EFFECTS OF ACUTE EXPOSURE:

Eye:	Causes irritation.
Skin:	Causes irritation.
Inhalation:	Excessive intentional inhalation may cause respiratory tract irritation and central nervous system effects (headache, dizziness). Aspiration of material into lungs can cause chemical pneumonitis.
Ingestion:	Harmful if swallowed. May cause stomach distress, nausea or vomiting.

EFFECTS OF CHRONIC EXPOSURE:

Peripheral nerve damage has been observed following occupational exposure to hexane. Prolonged or repeated overexposure can cause liver and kidney damage.

Skin:	Prolonged or repeated exposure can cause drying, defatting and dermatitis.
Irritancy:	Skin, eyes, respiratory tract. Very serious irritant if trapped against skin.
Respiratory Tract Sensitization:	Non-hazardous by WHMIS/OSHA criteria.
Carcinogenicity:	Contains potential carcinogens.
Teratogenicity:	Contains potential teratogens. Toluene (benzene, methyl-) has caused fetotoxicity (reduced fetal weight), behavioural effects (effects on learning and memory) and hearing loss (in males). These effects have been observed in the offspring of rats exposed by inhalation to 1200 or 1800 ppm toluene. These effects were observed in the absence of maternal toxicity.
Mutagenicity:	Non-hazardous by WHMIS/OSHA criteria.
Reproductive Effects:	Non-hazardous by WHMIS/OSHA criteria.
Synergistic Materials:	Not available

SECTION VII - PREVENTATIVE MEASURES

Gloves:	Tychem™. Gloves.
Eye Protection:	Face shield or chemical goggles.
Respiratory Protection:	For confined spaces, wear a NIOSH-approved (or equivalent) full-facepiece airline respirator in the positive pressure mode with emergency escape provisions. Respirator should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134) and ANSI's standard for respiratory protection (Z88.2).
Other Protective Equipment:	Use of protective coveralls and long sleeves is recommended.
Engineering Controls:	Local exhaust recommended.
Leak and Spill Procedure:	Keep unnecessary personnel away. Remove sources of ignition. Before attempting clean up, refer to hazard data given above. Small spills may be absorbed with non-reactive absorbent and placed in suitable, covered, labelled containers. Prevent large spills from entering sewers or waterways. Contact emergency services and supplier for advice.
Waste Disposal:	Review federal, provincial, and local government requirements prior to disposal.
Handling Requirements:	Use good industrial hygiene practices in handling this material. When using do not eat or drink. Wash hands before breaks and immediately after handling the product.
Storage Requirements:	Keep out of reach of children. Do not store at temperatures above 120°F (49°C). Store in a tightly closed container in a cool, dry, well ventilated and dark place away from incompatible materials. Keep away from heat, open flames or other sources of ignition.

SECTION VIII - FIRST AID

Eye:	Flush with cool water. Remove contact lenses, if applicable, and continue flushing. Obtain medical attention if irritation persists.
-------------	--

Skin: Flush with cool water. Wash with soap and water. Obtain medical attention if irritation persists.

Inhalation: If symptoms develop, move victim to fresh air. If symptoms persist, obtain medical attention. If breathing has stopped, trained personnel should administer CPR immediately.

Ingestion: Do not induce vomiting. Never give anything by mouth if victim is unconscious, or is convulsing. Obtain medical attention.

SECTION IX - PREPARATION INFORMATION

Effective Date: 15-Mar-2009

Expiry Date: 15-Mar-2012

Issue Date: 17-Apr-2009

Prepared By: Dell Tech Laboratories Ltd. (519) 858-5021

Information contained herein was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the requirements of all applicable legislation and regulatory instruments. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages which may result from the use of or reliance on any information contained in this document.