



MATERIAL SAFETY DATA SHEET

SECTION 1 - PRODUCT IDENTIFICATION AND USE

Product Name: Methyl Hydrate (Methanol, Methyl Alcohol)
Product Class: Solvent, fuel, feed stock
WHMIS Classification: Class B2 Flammable Liquid
Class D1A Causing immediate and serious toxic effects - Very toxic material.

Supplier Name and Address: COASTAL Blending & Packaging
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Saint John, N.B.
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Phone: 800-574-5823
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SECTION 2 - HAZARDOUS INGREDIENTS OF MATERIALS

<u>Hazardous Ingredients</u>	<u>CAS#</u>	<u>wt%</u>	<u>ACGIH-TLV</u>	<u>LC₅₀</u>	<u>LD₅₀</u>
Methyl Alcohol	67-56-1	99.85%	200 ppm	Rat: Inhalation 64 000 ppm	Rat: Oral 6.2-13.0 g/kg Rabbit: Dermal 20 ml/kg

SECTION 3 - PHYSICAL DATA AND CHEMICAL PROPERTIES

Form:	Liquid	Freezing Point (°C):	-97.8
Colour:	Colourless	Vapour Pressure(mmHg@20°C):	96
Odour:	Slight alcohol odour	Vapour Density (air=1 @ 15°C):	1.105
Odour Threshold:	2000 ppm, irritation @ 1000 ppm	Evaporation Rate (n-butyl acetate=1):	2.1
Specific Gravity @ 15°C:	0.79	Volatile (% volume)	100
Solubility in Water:	Soluble	Water/Oil Distrib. Coefficient:	Readily water soluble, separates from oil.
Boiling Point (°C):	64.5		

SECTION 4 - FIRE AND EXPLOSION HAZARD

Flammability: Yes No
Flash Point : 11°C (TCC)

Conditions: In presence of ignition source.

Upper Flammable Limit: 36%
Auto Ignition Temperature: 385-470°C
Sensitivity to Impact: Not available.

Lower Flammable Limit: 6%
TDG Flammability Classification: Class 3 (6.1), II
Sensitivity to Static Discharge: Low

Means of Extinction: Water spray, dry powder, AFFF(Aqueous Film Forming Foam) Alcohol resistant type with 6% foam proportioning equipment or Carbon Dioxide.

Hazardous Combustion Products: Toxic gases and vapours; oxides of carbon and formaldehyde.

Special Procedures: Methanol burns with a clean clear flame which is almost invisible in daylight. Concentrations of greater than 20% methanol in water can be ignited. Water may be ineffective depending upon depth of Methanol burning. Use fine water spray or fog to control fire spread and cool structures or containers. Fire fighters must wear full face, positive pressure, self-contained breathing apparatus or airline and appropriate protective clothing.

SECTION 5 - REACTIVITY DATA

Stability: This product is stable.

Hazardous Polymerisation: Will not occur.

Conditions to avoid: Excessive heat or open flame.

Incompatibility with other substances: Strong oxidising agents, strong acids, strong bases.

Hazardous decomposition products: Formaldehyde and Carbon monoxide. May be corrosive to lead and aluminium.

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SECTION 6 - TOXICOLOGICAL PROPERTIES

Route of Entry: Eye Skin Contact Skin Absorption Inhalation Ingestion

Effects of Acute Exposure: Swallowing even small amounts of methanol can cause blindness and death. Other effects may be nausea, headache, abdominal pain, vomiting and visual disturbances ranging from blurred vision to light sensitivity. Inhalation of high airborne concentration can also irritate mucous membranes, cause headaches, sleepiness, nausea, confusion, loss of consciousness, digestive and visual disturbances and death.

Effects of Chronic Exposure: Repeated exposure by inhalation or absorption may cause systemic poisoning, brain disorders, impaired vision and blindness. Inhalation may worsen conditions such as emphysema or bronchitis. Repeated skin contact may cause birth defects in rats exposed to 20 000 ppm.

Exposure Limits: ACGIH TLV-TWA: 200ppm, STEL: 250 ppm skin notation, OSHA PEL: 200 ppm, STEL: 250 ppm skin. **Carcinogenicity:** Not listed as a carcinogen.

Reproductive Toxicity: Not established. **Teratogenicity:** No
Irritancy of Product: 1000 ppm in air may cause irritation of mucous membrane. **Mutagenicity:** No

SECTION 7 - PREVENTATIVE AND CORRECTIVE MEASURES

Personal Protective Equipment: *Gloves:* Butyl and nitrile rubbers are recommended. Check with glove manufacturer.
Eye: Chemical safety glasses or full face shield.
Respiratory: NIOSH approved, with consideration for poor warning properties.
Footwear: Chemical resistant.
Clothing: Wear chemical resistant pants and jackets, preferably butyl or nitrile rubber. Check with manufacturer.
Other:

Engineering Controls: In confined areas, local and general ventilation should be provided to maintain airborne concentrations below permissible exposure limits. Ventilation systems must be designed according to approved engineering standards.

Leak and Spill Procedure: Extremely flammable liquid. Release can cause an immediate fire/explosion hazard. Eliminate all ignition sources, stop spill and use absorbent materials. If necessary, contain spill by diking. Maximise methanol recovery for recycling or reuse if applicable. Collect liquid with explosion proof pumps. For small spills, collect with non-combustible sorbent. Recover methanol or dilute with water to reduce fire hazard. Prevent it from entering sewer, confined spaces, drains or waterways. Restrict access to unprotected personnel. Full-face, positive pressure self-contained breathing apparatus or airline and protective clothing must be worn.

Waste Disposal: Incineration is the recommended disposal method. Biodegradation may be used on dilute aqueous waste Methanol. Methanol wastes are not suitable for underground injection. Waste materials must be disposed of in accordance with municipal, provincial and federal regulations. Contact the proper authorities for specific instructions.

Storage Requirements: Store in totally enclosed equipment, designed to avoid ignition and human contact. Tanks must be diked. avoid storage with incompatible materials. Store away from ignition sources, use explosion proof electrical equipment. Ensure proper electrical grounding procedures are in place.

Special Shipping Information: UN Number 1230.

SECTION 8 - FIRST AID MEASURES

Inhalation: Remove to fresh air, if breathing has stopped administer artificial respiration, seek medical attention.

Ingestion: Swallowing Methanol is life threatening. If conscious and medical aid is not immediately available, dilute stomach contents by giving large amounts of water or milk and induce vomiting. Seek medical attention immediately.

Eye: Flush with water for 15 minutes, seek medical attention.

Skin: Remove contaminated clothing. Clean exposed area with soap and water. If irritation occurs, seek medical attention.

General Advice:

SECTION 9 - PREPARATION DATE OF MSDS

MSDS Prepared by: Irving Lubricants **Phone:** (506) 632-7000
MSDS Date: January 11, 2010
Revision: 02

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