

MATERIAL SAFETY DATA SHEET

Captain Phab

Marine Alcohol
Part # 306, 307

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

<u>PRODUCT NAME:</u>	Marine Stove Fuel	<u>PRODUCT USE:</u>	Stove Fuel
<u>MANUFACTURER:</u>	Captain Phab Ltd.	<u>SUPPLIER:</u>	Captain Phab Ltd.
<u>ADDRESS:</u>	613 Neal Drive, Peterborough, Ontario, K9J 6X7	<u>ADDRESS:</u>	613 Neal Drive Peterborough, Ontario, K9J 6X7
<u>EMERGENCY #:</u>	1 888 228-4050	<u>EMERGENCY #:</u>	1 888 228-4050

SECTION II: INFORMATION ON INGREDIENTS

Ingredients	CAS#	Wt%	ACGIH-TLV	LD ₅₀	LC ₅₀
Ethyl Alcohol	64-17-5	75 - 95	1000 ppm	5620 MG/KG Rat oral	200,000 MG/M3 Rat inhalation
Methyl Alcohol	67-56-1	5 - 10	200 ppm (skin)	5600 MG/KG Rat oral	81,000 MG/M3/14H Rabbit inhalation

SECTION III: HAZARDOUS IDENTIFICATION

Route of Entry:	Eye contact, skin contact, skin absorption, inhalation and ingestion.
Eye Contact:	May cause irritation.
Skin Contact:	Irritant. May cause drying, defatting.
Skin Absorption:	No adverse effects are expected with normal use. May be absorbed through the skin.
Inhalation:	Irritant. Intoxication. May cause drowsiness. May cause anaesthesia effects. Headaches, dizziness.
Ingestion:	May cause dizziness. May cause headache and drowsiness. May cause signs of intoxication. May cause anaesthesia effects.
Chronic Effects:	May cause liver damage. May cause blindness. Prolonged or repeated overexposure may cause drying and cracking of the skin (dermatitis).
Carcinogenicity:	Not listed as a carcinogen. Long term exposure to methanol has been associated with dermatitis, erythema, headaches, giddiness, conjunctivitis, insomnia and impaired vision. May cause heart, kidney, lung, central nervous system, liver, spleen, brain, and eye damage. Long term repeated oral exposure to ethanol may result in the development of progressive liver injury with fibrosis. May damage other organs (see acute effects). Ethanol: Passes placental barrier and excreted in maternal milk in humans. Carcinogenic effects: Not available. Mutagenic effects: Not available. Toxicity of the product to the reproductive system: Not available. Medical conditions which may be aggravated: Individuals with preexisting diseases of the skin, eye, or liver may be more susceptible to the toxicity of overexposure to this product.

MATERIAL SAFETY DATA SHEET

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Part # 306, 307

SECTION IV: FIRST AID MEASURES

- Eye Contact: Flush eyes with clear, running water for 15 minutes while holding eyelids open. If irritation persists, consult a physician.
- Skin Contact: Remove contaminated clothing. Wash with mild soap and water. Consult a physician if irritation persists.
- Inhalation: Remove victim to fresh air. If not breathing, qualified personnel should administer artificial respiration. Get medical attention.
- Ingestion: Obtain immediate medical attention. Give large quantities of water to drink. Do not induce vomiting, keep person warm, quiet. Guard against aspiration of liquids into lungs. If vomiting occurs, keep head below hips. Never give anything by mouth to an unconscious person.

NOTES TO PHYSICIAN: This product contains 14.3% v/v of methanol, a toxic substance having produced blindness and other serious effects on vision, as well as death. However, this product also contains the accepted antidote, ethanol (85% v/v).

SECTION V: FIRE FIGHTING MEASURES

- Flammability: Flammable.
- Conditions of Flammability: Heat, sparks, and opens flames.
- Flash Point (°C), method): (Minimum). 12°C.
- Means of Extinction: Water, chemical powder.
- Special Fire Fighting Procedures: Firefighters should wear adequate protective gear. Self contained breathing apparatus required. This product floats on water which creates a fire hazard.
- Auto Ignition Temperature: (Minimum). 385°C.
- Flame Propagation or Burning Rate of Solid:
- Sensitivity to Static Discharge: Not sensitive.
- Unusual Fire and Explosion Hazards: Not available.
- Hazardous Composition Products: Carbon monoxide (CO), Smoke, Nitrogen oxides (NO_x).

SECTION VI: ACCIDENTAL RELEASE MEASURES

- Leak and Spill Procedures: Eliminate all sources of ignition. Dike area to prevent spreading. Ventilate area. Wear appropriate protective equipment. Ground handling equipment. Use non-sparking tools. Explosion proof motors are recommended. Soak up with inert absorbent. Pump to containers or soak up on inert absorbent. Place in a closed container for disposal.

SECTION VII: HANDLING AND STORAGE

- Storage Requirements: Keep away from heat, sparks, and open flame. Avoid breathing vapours/mists. Use adequate ventilation. Wear personal protective equipment appropriate to task. Use proper grounding procedures. Avoid contact with skin, eyes and clothing. Do not cut, grind, weld or drill on or near containers. Launder contaminated clothing prior to reuse. Store away from all sources of ignition. Store away from incompatible materials. Store in a cool, dry and well ventilated area.
- Incompatible substances: Oxidizing agents, acids, bases, reducing agents, acid chlorides,

MATERIAL SAFETY DATA SHEET

Captain Phab

Marine Alcohol
Part # 306, 307

acid anhydrides, alkylaluminum solutions, acetyl bromide, acetyl chloride, ammonia, silver oxide, interhalogens, halogens, chlorine trioxide, chromic anhydride, chromyl chloride, peroxides, iodine, mercuric oxide, perchlorates, perchloric acid, permanganates, potassium t-butoxide, silver, sodium hydrazide, acetaldehyde, ethylene oxide, hexamethylene diisocyanate, hypochlorous acid, isocyanates, phosphorus trioxide, hydrides, carbon tetrachloride, chloroform, dichloromethane, diethylzinc, metals (potassium, magnesium, etc...), acetic anhydride, tetrachlorosilane, 2-propanol, hypochlorites, cyanuric acid.

SECTION VIII: EXPOSURE CONTROL / PERSONAL PROTECTION

Skin Protection: Rubber gloves.
Eye Protection: Safety glasses.
Respiratory Protection: None required under normal use. If TLV is exceeded NIOSH approved organic vapours.
Clothing/Type: Long sleeve shirt, long trousers. Apron.
Footwear/Type: Rubber boots.
Other Protective Equipment: Eye wash facility should be in close proximity. Emergency shower should be in close proximity.
Engineering Controls: As needed to stay below TLV.

SECTION IX: PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point (deg C):	74 - 79	Specific Gravity @ (density) 0.791 20°C: (20/20°C)	Evaporation Rate (butyl acetate = 1):	Not available
% Volatile (Wt%):	Not available	Solubility in water:	pH (as supplied):	Not available
Physical State:	Liquid	VOC	Freezing point (°C):	-114°C
Coefficient of water/oil dist.:	Not available			
Vapour pressure (mmHg):	@ 20°C (68°F). 12 kPa	Vapour density: (air=1)	1.4	
Appearance / Odour:	Clear. Transparent. Alcoholic odour.	Odour Threshold: (ppm)	5-10 ppm	

SECTION X: STABILITY AND REACTIVITY

Stability: Stable under normal conditions.
Conditions to Avoid: None known.
Incompatible Materials: Combustibles.
Hazardous Decomposition Products: See hazardous combustion products.
Hazardous Polymerization: Will not occur.

MATERIAL SAFETY DATA SHEET

Captain Phab

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SECTION XI: TOXICOLOGICAL INFORMATION

ETHANOL:

ORAL (LD50): Acute: 3450 mg/kg (Mouse). 7060 mg/kg (Rat). 6300 mg/kg (Rabbit).

VAPOR (LC50): Acute: 20000 ppm (Rat) (10 hour(s)). 39000 mg/m³ (Mouse) (4 hour(s))

METHANOL:

ORAL (LD50): Acute: 7300 mg/kg (Mouse). 14200 mg/kg (Rabbit).

DERMAL (LD50): Acute: 15800 mg/kg (Rabbit).

VAPOR (LC50): Acute: 64000 ppm (Rat) (4 hour(s)).

SECTION XII: ECOLOGICAL INFORMATION

Biodegradability: Readily biodegradable.

SECTION XIII: DISPOSAL CONSIDERATIONS

Dispose of in accordance to all local, provincial/state and federal regulations.

SECTION: XIV: TRANSPORTATION

T.D.G. Classification: Class 3 UN 1170 Ethanol Solution more than 24% by volume Packing Group II.
1 liter or less is Limited Quantity

SECTION XV: REGULATORY INFORMATION

Occupational Health and Safety Regulations:

WHMIS Classification:

B2, D1B, D2A.

Environmental Regulatory Lists:

The substance(s) listed in section 2 appear on the Domestic Substances List.

DSL status:

SECTION XVI: OTHER INFORMATION

Date:	March 29, 2012	Prepared By:	Technical Services Group	Telephone:	1 888 228-4050
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Disclaimer:

Information for this material safety data sheet 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 the control of supplier, it is assumed that users of this material have been fully trained according to the mandatory requirements of WHMIS.

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