

MATERIAL SAFETY DATA SHEET

Captain Phab Ltd.

Environmental Choice Hull & Bottom Cleaner
Part # 372, 373, 374, 375

SECTION 1A: MATERIAL IDENTIFICATION

PRODUCT NAME: ENVIRONMENTAL CHOICE HULL & BOTTOM CLEANER
WHMIS Class: Class D – Division 2 B
Class E – Note: Corrosive to aluminum only. Non-corrosive to skin and mild steel.

PRODUCT USE: CLEANER
Chemical Family: Organic acid salt

SECTION 1B: SUPPLIER IDENTIFICATION

MANUFACTURER: Captain Phab Ltd.
SUPPLIER: Captain Phab Ltd.

ADDRESS: 613 Neal Drive, Peterborough, Ontario, K9J 6X7
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EMERGENCY #: 1 888 228-4050
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SECTION 2: HAZARDOUS INGREDIENTS OF MATERIAL

Hazardous Ingredients	% Concentration	CAS Number	LD50 Oral, Rat – Mg/Kg
Organic Salt	30 – 50 %	506-89-8	Not applicable
Alcohol Ethoxylate	1 – 5	68991 – 48 -0	72,000 mg/kg

SECTION 3: HAZARDS IDENTIFICATION

Emergency Overview: This product is a colorless to slight amber liquid with a mild odor. It is corrosive to the eyes and a mild skin irritant. If ingested this product may be harmful or fatal.

Potential Health Effects: Causes burns to the eyes.

- **Eye:**
- **Skin:** Prolonged or repeated contact can cause irritation.
- **Ingestion:** This product may be harmful or fatal if ingested.
- **Inhalation:** Not a likely route of exposure due to physical properties. Product has a low vapour pressure at room temperature and is not expected to present a significant inhalation hazard under ambient conditions. Product can be irritating to the respiratory tract if inhaled as a mist or if the material is vaporized.

Chronic Effects:

Skin: Prolonged or repeated exposure can cause drying, defatting, and dermatitis.

Carcinogenicity: Non-hazardous by WHMIS/OSHA criteria. Not listed by IARC, NTP, or ACGIH.

Teratogenicity, Mutagenicity, Reproductive Effects: This product was found not to be mutagenic when tested by the Ames Assay, (OECD Guidelines for Testing of Chemicals, Sec. 471).

Synergistic Materials: Not available.

Potential Environmental Effects: No data available.

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SECTION 4: FIRST AID MEASURES

Inhalation: Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen and seek medical attention.

Skin: Immediately flush with mild soap and water for 15 minutes. Seek medical attention if irritation develops. Remove contaminated clothing and launder before reuse.

Eye: Immediately flush with water for 15 minutes. Seek medical attention.

Ingestion: **DO NOT** induce vomiting. If conscious, give 3 – 4 glasses of water to dilute and get immediate medical attention.

SECTION 5: FIRE AND EXPLOSION DATA

Flammability: Not flammable.

If Yes, under which conditions:

Means of Extinction: Water spray, carbon dioxide and dry chemical.

Special Fire Fighting Procedures: Evacuate personnel to a safe area. Keep containers cool with water spray. Avoid breathing decomposition products. Wear self-contained breathing apparatus and full body protection.

Flashpoint (°C) and Method: Does not ignite.

Auto Ignition Temperature (°C): Not applicable.

Flame Propagation or Burning Rate of Solid Materials: Not applicable.

Hazardous Decomposition Products: Thermal decomposition may yield oxides of carbon, nitrogen, and chlorine. Hydrogen gas may be released upon contact with certain metals.

Explosion Data:

- **Unusual Fire and Explosion Hazard:** At temperatures above 60°C/140°F acid action on most metals may release hydrogen, a highly flammable and explosive gas.
- **Sensitivity to Impact:** Not applicable.
- **Sensitivity to Static Discharge:** Not applicable.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Leak and Spill Procedure: Evacuate area. Ventilate area. Collect for disposal. Clean up remaining materials from spill with suitable absorbent. Small spills may be absorbed with non-reactive absorbent (sand) and placed in suitable, covered, labeled containers. For large spills provide diking or other appropriate containment to keep material from spreading. Prevent large spills from entering sewers or waterways. If diked material can be pumped, store recovered material in compatible drums for recovery or disposal. Observe all personal protection equipment recommendations.

SECTION 7: HANDLING AND STORAGE

Keep Out of Reach of Children. Keep container tightly closed. Store in fiberglass, polyethylene, or polypropylene containers. Do not store in metal containers, especially aluminum. Storage in certain metal containers at temperatures above 60°C/140°F may result in hydrogen gas evolution. Do not store at temperatures above 48°C/120°F.

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SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

Engineering Controls:	If current ventilation practices are not adequate for minimizing exposures, additional ventilation or exhaust systems may be required.
Respiratory Protection:	Not normally required if good ventilation is maintained. Avoid breathing vapour and / or mist.
Eye Protection:	Use chemical goggles or full face shield.
Skin Protection:	Use impervious (rubber, nitrile) gloves.
Other Protective Clothing or Equipment:	Eye bath, Safety shower, Full protective clothing.

SECTION 9: PHYSICAL DATA

Physical State:	Liquid.
Appearance and Odour:	Clear amber liquid, mild odour.
Activity:	60 % Typical.
Boiling Point:	100°C (212°F).
Freezing Point (°C):	<30°C.
Solubility in Water:	Soluble (100% in water).
pH:	0.7 (Typical).
pKa:	0.176.
Specific Gravity(H₂O = 1):	1.21 +/-0.2.
Density (25°C):	10.1 lbs/gal.
Normality:	7.4 +/- 0.2.

SECTION 10: REACTIVITY DATA

Stability:	Stable up to 110°C / 230°F.
Conditions to avoid:	Heating above 110°C results in an exothermic decomposition with rapid release of CO ₂ gas.
Incompatible Materials:	Avoid contact with oxidizers. This material may be extremely hazardous in contact with chlorates or nitrates. This material is acidic. Contact with hypochlorites (e.g. chlorine bleach, sulfides, or cyanides will liberate toxic gases. Contact with alkaline materials (e.g. aqua ammonia) will generate heat.
Hazardous Decomposition Products:	Thermal decomposition may yield oxides of carbon, nitrogen, and chlorine. Hydrogen gas may be released upon contact with certain metals.
Hazardous Polymerization:	Will not occur.

SECTION 11: TOXICOLOGICAL INFORMATION

Carcinogenicity:	Non-hazardous by WHMIS/OSHA criteria. Not listed by IARC, NTP, OR ACGIH.
Teratogenicity, Mutagenicity, Reproductive Effects:	This product was found <u>not</u> to be mutagenic when tested by the Ames Assay, (OECD Guidelines for Testing of Chemicals, Sec 471).
Synergistic Materials:	Not available.
Acute Eye Irritation/Corrosion Test:	This product was found to be corrosive to the eyes when tested using the modified Draize method (OECD Guidelines for testing of chemicals, Sec. 4-5, 1992).

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SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity: 96 hour LC₅₀>140 mg/L (rainbow trout), 48 hour LC₅₀ 71.1 mg/L (ceriodaphnia dubia), 15 minute IC₅₀, 16.23% effect at a concentration of 10 mg/L (Vibrio fischeri, 4H6002)

Environmental Fate: Urea is biodegradable.

SECTION 13: DISPOSAL INFORMATION

Review federal, provincial, or state and local government requirements prior to disposal.

SECTION 14: REGULATORY INFORMATION

Occupational Health & Safety Regulations:

WHMIS Classification: Class D – Division 2B.
Class E – Note: This material is corrosive to Aluminum only.
Non- corrosive to skin and mild steel.

OSHA & WHMIS: MSDS prepared pursuant to the Hazard Communication Standard (CFR29 1910.1200) and Canadian WHMIS regulations (Controlled Products Regulations under the Hazardous Products Act).

Environmental Regulatory Lists:

SARA: Section 313 (Toxic Chemical Release Reporting) 40 CFR 372 – None of the ingredients are listed.
Toxic Substances Control Act (TSCA): All the ingredients are listed on the Chemical Substance Inventory
Canadian Domestic Substance List (DSL): All ingredients are listed.

HMIS Rating

Health: 2
Flammability 0
Reactivity: 0
PPE: B

SECTION 16: PREPARATION INFORMATION OF THE MSDS

Date:	January 2, 2014	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. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries for consequential damages, which may result from the use or reliance on any information contained in this form. If user requires independent information on ingredients in this or other material, we recommend contact with the Canadian Centre for Occupational Health and Safety (CCOHS) in Hamilton, Ontario (905-572-4400) or CSST in Montreal, Quebec (514-873-3990).