



GLENGARRY CHEMICALS LTD.

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MATERIAL SAFETY DATA SHEET

Emergency Telephone Numbers:

CANUTEC: 1-613-996-6666
POISON CONTROL CENTRE: 1-800-268-9017

W.H.M.I.S. CLASSIFICATION: D2B, E

SECTION I PRODUCT INFORMATION

Product Name : CT-3010
Product Use : Cooling Tower Treatment
Chemical Family : Mixture
Chemical Formula : Mixture

SECTION II HAZARDOUS INGREDIENTS

COMPONENTS	Wt / Wt %	LD ₅₀ Oral-rat	HAZARD	CAS NO.
Sodium Molybdate	1 to 10	4000 mg/Kg	Irritant	10102-40-6
Diethylenetriamine penta(methylenephosphonic acid)	1 to 10	7,180 mg/kg	Corrosive, Slightly Toxic	15827-60-8
Sodium Hydroxide	1 to 10	N/Av	Corrosive	1310-73-2
Zinc sulfate	1 to 10	2150 mg/kg	Mildly Toxic	7446-20-0
Benzotriazole	1 to 10	560 mg/Kg	Toxic	95-14-7

SECTION III PHYSICAL STATE

Appearance and Physical State : Clear Amber Liquid
Odour : Slight Acrid Odour Boiling Point (°C) : ~ 100
Specific Gravity (water = 1) : 1.20 - 1.25 Freezing Point (°C) : ~ 0
Vapour Pressure (mm Hg) : Not Available % Volatile (by weight) : > 60 (as Water)
Vapour Density (air = 1) : Not Available pH Product : 11.5 - 12.5
Evaporation Rate : Not Available pH 1% Solution :
Solubility in Water : Miscible Coefficient of Water/Oil Distribution : Not Applicable

SECTION IV FIRE AND EXPLOSION HAZARD DATA

Flammability: Non-Flammable
Upper Explosive Limit : Not Applicable Lower Explosive Limit : Not Applicable
Flash Point : Not Applicable
Means of Extinction: Appropriate for surrounding materials.
Special Procedures : Self contained breathing apparatus and protective clothing should be worn in fighting all fires involving chemicals.

SECTION V HEALTH HAZARD DATA

A - EFFECTS OF ACUTE OVEREXPOSURE

EYES: Corrosive. Causes irritation, redness, and pain. May cause corneal damage and conjunctivitis.
SKIN: Corrosive. May cause irritation or burning of the skin.
INHALATION: Product is not volatile, however mists cause respiratory tract irritation.
INGESTION: May cause severe irritation and burns of the mouth, throat and digestive system. May cause systemic effects, abdominal discomfort, nausea, vomiting and diarrhea. Symptoms may include increased pulse rate, blood pressure decrease, acute pulmonary edema, kidney damage, other gastrointestinal disturbances and hemorrhagic pancreatitis.

B - EFFECTS OF CHRONIC OVEREXPOSURE

Chronic exposure to zinc: Tumorigenic effects have been reported in experimental animals.. Experiments have shown reproductive toxicity effects on laboratory animals. Prolonged or repeated skin contact with corrosive materials may cause dermatitis. Prolonged or repeated eye contact may cause conjunctivitis.

SECTION VI EMERGENCY AND FIRST AID

- EYES:** Wash with copious amount of cold water for at least 20 minutes keeping eyelids open. If irritation persists, repeat flushing. Obtain medical attention immediately.
- SKIN:** Immediately wash the affected areas with plenty of water. If irritation, redness or burning sensation develops obtain medical advice.
- INHALATION:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.
- INGESTION:** Do not attempt to give anything by mouth to an unconscious person. If person is alert and not convulsing rinse mouth out and give 1-2 glasses of water to dilute material and seek medical attention immediately. Do not induce vomiting.

SECTION VII TOXICOLOGICAL DATA

- Exposure Limits:** Not Available
- Carcinogenicity:** The ingredients of this product are not classified as carcinogens by ACGIH or IARC, not regulated as carcinogen by OSHA, and not listed as carcinogen by NTP.
- Reproductive Effects:** See Section V(B)
- Mutagenic Effects:** No information is available.
- Teratogenic Effects:** No information is available.
- Sensitization:** No information is available.
- Routes of Entry:** Ingestion, Inhalation, Skin and eye absorption.

SECTION VIII SPILL OR LEAK PROCEDURES

Steps To Be Taken In Case Material Is Spilled Or Released:

Wear protective equipment. Contain the spill and soak up with an absorbent material. Collect for disposal.

Disposal Procedures:

Follow your local, provincial, and federal government chemical disposal regulations.

SECTION IX PROTECTION INFORMATION

- Engineering Controls:** Local Exhaust.
- Respiratory Protection:** NIOSH/MSHA approved mist respirator, if misting conditions exists.
- Protective Clothing:** Chemical resistant Gloves, apron or impervious protective clothing.
- Eye Protection:** Chemical safety goggles.
- Other Protective Equipment:** Eye Wash Station and Safety Shower.

SECTION X REACTIVITY DATA

- Stability:** Stable.
- Conditions to Avoid:** Avoid strong oxidizing agents and strong alkali.
- Hazardous Polymerization:** Will Not Occur.
- Incompatibility to Other Substances:** Oxidizing agents, strong reducing agents and alkali.
- Hazardous Combustion Products:** Thermal decomposition products are toxic and may include phosphines, CO, CO₂, oxides of nitrogen, zinc, and sulphur, and other acrid fumes.

SECTION XI HANDLING AND STORAGE PRECAUTIONS

Use normal "good" industrial hygiene and housekeeping practices. Wear appropriate safety equipment when handling. Store away from incompatibles. Keep containers closed when not in use and store in a cool dry place .

SECTION XII FURTHER INFORMATION

TDG CLASSIFICATION:

Shipping Name: CORROSIVE LIQUID N.O.S. (Sodium hydroxide Solution)
UN Number: UN1760 **Class:** 8 **Packing Group:** III

Preparation Information:

Prepared By: Regulatory Department
Revision Date: 5-Nov-14 **Preparation Date:** 12-Apr-12

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