



GLENGARRY CHEMICALS LTD.

100 Melford Drive, Unit 1

Scarborough, ON M1B 2G4

Phone: 416-757-1333 Fax: 416-757-9793

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: B2, D1A, D2A

SECTION I PRODUCT INFORMATION

Product Name : Phenolphthalein Indicator, T131-4
Product Use : Analytical Reagent
Chemical Family : Organic indicator
Chemical Formula : Mixture

SECTION II HAZARDOUS INGREDIENTS

| COMPONENTS | Wt / Wt % | LD ₅₀ Oral-rat | HAZARD | CAS NO. |
|-----------------|-------------|------------------------------|---------------------|---------|
| Phenolphthalein | 0.1 to 1.0 | Not Available | Low Hazard Irritant | 77-09-8 |
| Ethanol | 30 to 70 | 7060 mg/Kg | Flammable | 64-17-5 |
| Methanol | 1.0 to 10.0 | 5628 mg/kg | Flammable and Toxic | 67-56-1 |

SECTION III PHYSICAL STATE

Appearance and Physical State : Clear and colourless liquid
Odour : Slight alcoholic odour
Boiling Point (°C) : Not Available
Specific Gravity (water = 1) : 0.95 - 1.0
Freezing Point (°C) : Not Available
Vapour Pressure (mm Hg) : Not Available
% Volatile (by weight) : > 60%
Vapour Density (air = 1) : Not Available
pH Product : 7.0 to 9.0
Evaporation Rate : Not Available
pH 1% Solution :
Solubility in Water : Miscible
Coefficient of Water/Oil Distribution : Not Available

SECTION IV FIRE AND EXPLOSION HAZARD DATA

Flammability: Flammable
Upper Explosive Limit : 19% (Ethanol) **Lower Explosive Limit** : 3.3% (Ethanol)
Flash Point : 18°C (Ethanol)
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: Causes severe eye irritation. May cause painful sensitization to light. May cause chemical conjunctivitis and corneal damage.

SKIN: May cause irritation

INHALATION: Inhalation of high concentrations may cause central nervous system effects characterized by nausea, headache, dizziness, unconsciousness and coma. Causes respiratory tract irritation. May cause narcotic effects in high concentration. Vapors may cause dizziness or suffocation.

INGESTION: May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May cause systemic toxicity with acidosis. May cause central nervous system depression, characterized by excitement, followed by headache, dizziness, drowsiness, and nausea. Advanced stages may cause collapse, unconsciousness, coma and possible death due to respiratory failure.

B - EFFECTS OF CHRONIC OVEREXPOSURE

May cause reproductive and fetal effects. Laboratory experiments have resulted in mutagenic effects. Animal studies have reported the development of tumors. Prolonged exposure may cause liver, kidney, and heart damage.

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 and 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. Administer artificial respiration, if breathing has stopped and seek medical attention immediately.
- 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:** ACGIH / OSHA / NIOSH (TWA) : 1000 ppm (Ethanol)
- Carcinogenicity:** Phenolphthalein is listed as Suspect carcinogen by NTP, Possible Select carcinogen by the OSHA, and Group 2B carcinogen by IARC.
- Reproductive Effects:** See Section V (Effects of Chronic Overexposure)
- Mutagenic Effects:** See Section V (Effects of Chronic Overexposure)
- Teratogenic Effects:** See Section V (Effects of Chronic Overexposure)
- 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 inert 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 respirator
- 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:** Incompatible materials, ignition sources, excess heat, combustible materials.
- Hazardous Polymerization:** Will Not Occur
- Incompatibility to Other Substances:**
Strong acids and oxidizing agents
- Hazardous Combustion Products:**
Thermal decomposition products are toxic and may include carbon monoxides and dioxides.

SECTION XI HANDLING AND STORAGE PRECAUTIONS

Use normal "good" industrial hygiene and housekeeping practices, and wear safety equipment when handling this material. Keep containers closed when not in use. Store in a cool dry place away from incompatible materials. Avoid sources of ignition.

SECTION XII FURTHER INFORMATION

TDG CLASSIFICATION:

NOT REGULATED

Preparation Information:

Prepared By: Regulatory Department

Revision Date: 16-Sep-04

Preparation Date: 09-Aug-01

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