



# 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: D1A, D2A, E

### SECTION I PRODUCT INFORMATION

Product Name : Sulphuric Acid, T131-10  
Product Use : Analytical Reagent  
Chemical Family : Inorganic Acid  
Chemical Formula : H<sub>2</sub>SO<sub>4</sub>

### SECTION II HAZARDOUS INGREDIENTS

COMPONENTS	Wt / Wt %	LD <sub>50</sub> Oral-rat	HAZARD	CAS NO.
Sulphuric Acid	30 to 70	2140 mg/Kg	Corrosive	7664-93-9

### SECTION III PHYSICAL STATE

Appearance and Physical State : Clear and colourless liquid  
Odour : None 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) : 30 - 70 (as Water)  
Vapour Density (air = 1) : Not Available pH Product :  
Evaporation Rate : Not Available pH 1% Solution : < 1  
Solubility in Water : Miscible Coefficient of Water/Oil Distribution : Not Available

### 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 to eye tissue and may cause severe damage and blindness. Inflammation of the eye is characterized by redness, watering, and itching.

**SKIN:** Corrosive! Effects on the skin may be delayed and damage may occur without the onset of pain. Concentrated solutions may cause second or third degree burns with severe necrosis and may cause permanent scarring.

**INHALATION:** Inhalation of the mist may produce severe irritation of respiratory tract, characterized by coughing, choking, or shortness of breath.

**INGESTION:** Corrosive. Swallowing can cause severe burns of the mouth, throat, and stomach, leading to death. Can cause sore throat, vomiting, diarrhea. Circulatory collapse with clammy skin, weak and rapid pulse, shallow respirations, and scanty urine may follow ingestion or skin contact.

#### B - EFFECTS OF CHRONIC OVEREXPOSURE

Prolonged or repeated inhalation may cause nosebleeds, nasal congestion, erosion of the teeth, perforation of the nasal septum, chest pain and bronchitis. Prolonged or repeated eye contact may cause conjunctivitis. Occupational exposure to inorganic acid mists containing sulphuric acid is carcinogenic to humans.

## 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. 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:** OSHA / NIOSH (TWA) : 1 mg/m<sup>3</sup>; ACGIH - TWA: 0.2 mg/m<sup>3</sup>
- Carcinogenicity:** Sulphuric acid is listed by ACGIH (contained in strong inorganic acid mists) as A2 - Suspected, OSHA as Select carcinogen, and IARC as Group 1 carcinogen
- Reproductive Effects:** Animal studies with sulphuric acid on rabbits has shown specific developmental abnormalities on musculoskeletal system.
- 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 spill and soak up with an inert absorbent and 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 for acids 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:** Incompatible materials, contact with metals, excess heat, combustible materials, organic materials, oxidizers, amines, bases.
- Hazardous Polymerization:** Will Not Occur.
- Incompatibility to Other Substances:** Strong oxidizing and reducing materials, strong bases. Will react with most metals to form hydrogen gas.
- Hazardous Combustion Products:** Thermal decomposition products are toxic and may include oxide of sulphur.

## 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:** SULPHURIC ACID with not more than 51 per cent acid  
**UN Number:** UN2796      **Class:** 8      **Packing Group:** II

### Preparation Information:

**Prepared By:** Regulatory Department  
**Revision Date:** 12-Jan-06      **Preparation Date:** 09-Aug-01

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