



Comet Chemical Company Ltd.  
3463 Thomas Street Innisfil ,ON L9S 3W4  
Tel: (705) 436-5580 Fax: (705) 436-7194

# Material Safety Data Sheet

## SULPHURIC ACID

Revision Date: 2008/08/12

### Section 1 : PRODUCT AND COMPANY IDENTIFICATION

**Chemical family:** Mixture.

**Product uses:** Fertilizer, dyes, electroplating, explosives, metal pickling, petroleum refining, battery acid.

**Product name:** Sulphuric Acid

**Supplier:** Comet Chemical Ltd.  
3463 Thomas Street  
Innisfil, On.  
L9S 3W4.

**Supplier 24 hour phone number:** (705)436-5580 – weekdays from 8:00-5:00.  
(800)567-7455 all other times (Newalta Services).

### Section 2 : INGREDIENT INFORMATION

C.A.S.	CONCENTRATION %	Ingrédient	V.L.E.	DL/50	CL/50
7664-93-9	92-98	SULFURIC ACID	1 MG/M3	350 MG/KG RAT ORAL	510 MG/M3/2H RAT INHALATION  320 MG/M3/2H MOUSE INHALATION

### Section 3 : HAZARD IDENTIFICATION

**Route of entry:** Skin contact, eye contact, inhalation and ingestion.

#### Effects of acute exposure

**Eye contact:** Corrosive.  
Causes eye damage.

**Skin contact:** Corrosive.  
May cause skin discoloration.  
May cause pain.  
Severe corrosive burns.

**Skin absorption:** Not absorbed through the skin.

**Inhalation:** May be fatal if inhaled.  
Breathing difficulty.  
May cause pulmonary edema.  
Irritant of the respiratory tract.  
Coughing.  
Corrosive to the respiratory system.

- Ingestion:** May cause vomiting and diarrhea.  
Perforation of esophagus and stomach lining may occur.  
Severe burns to digestive tract.
- Effects of chronic exposure:** May cause emphysema.  
Prolonged or repeated overexposure may cause drying and cracking of the skin (dermatitis).  
May cause bronchitis.
- Sensitization to product:** Repeated skin contact may cause dermatitis.
- Carcinogenic effects:** Suspected.
- Reproductive effects:** Not available.
- Teratogenicity:** Not available.
- Mutagenicity:** Not available.
- Synergistic materials:** None known.

#### Section 4 : FIRST AID MEASURES

- Skin contact:** Remove contaminated clothing. Wash affected area with soap and water. Get medical attention.
- Eye contact:** Immediately flush eyes with running water for a minimum of 15 minutes. Hold eyelids open during flushing. Obtain medical attention immediately.
- Inhalation:** Remove victim to fresh air. If not breathing, qualified personnel should administer artificial respiration. Get medical attention.
- Ingestion:** Do not induce vomiting. Keep person warm, quiet and get medical attention.  
Guard against aspiration of liquids into lungs.  
Dilute with two glasses of water.  
If vomiting occurs, keep head below hips.  
Never give anything by mouth to an unconscious person.

#### Section 5 : FIRE FIGHTING MEASURES

- Flammability:** Not flammable.
- Conditions of flammability:** Surrounding fire.
- Extinguishing media:** Suitable for surrounding fire.
- Special procedures:** Firefighters should wear adequate protective gear.  
Self-contained breathing apparatus required.
- Auto-ignition temperature (°C):** Not applicable.
- Flash point (°C), method:** Not applicable.
- Lower flammability limit (% vol):** Not applicable.
- Upper flammability limit (% vol):** Not applicable.
- Explosion Data**
- Sensitivity to static discharge:** Not sensitive.

**Sensitivity to mechanical impact:** Not sensitive.  
**Hazardous combustion products:** Sulfur dioxide (SO<sub>2</sub>).  
Sulfur trioxide (SO<sub>3</sub>).  
**Rate of burning:** Not available.  
**Explosive power:** Not available.

**Section 6 : ACCIDENTAL RELEASE MEASURES**

**Leak/Spill:** Dike area to prevent spreading.  
Prevent entry into drains, sewers, and other waterways.  
Ventilate area.  
Wear appropriate protective equipment.  
Neutralize the residue with a dilute solution of sodium carbonate.  
Recover free liquid.  
Pump to containers or soak up on inert absorbent.  
Place in a closed container for disposal.  
Do not flush to sewer.

**Section 7 : HANDLING AND STORAGE**

**Handling procedures and equipment:** Avoid breathing vapors/mists.  
Use adequate ventilation.  
Wear personal protective equipment appropriate to task.  
Wash thoroughly after handling.  
Avoid contact with skin, eyes and clothing.  
If diluting, always add product to water slowly with constant stirring to avoid excessive heat generation.  
Launder contaminated clothing prior to reuse.

**Storage requirements:** Store away from incompatible materials.  
Store in a cool, dry and well ventilated area.

**Section 8 : EXPOSURE CONTROLS / PERSONAL PROTECTION**

**Precautionary Measures**

**Gloves/Type:**



Butyl rubber.  
Polyethylene gloves.  
Barricade gloves.  
Saranex gloves.  
Responder gloves.

**Respiratory/Type:**



NIOSH/MSHA approved respirator with acid gas cartridge may be used if necessary.

**Eye/Type:** 

Face shield.



Chemical safety goggles.

**Footwear/Type:** Neoprene boots.  
When splashing is possible.

**Clothing/Type:** Long sleeve shirt, long trousers.  
When splashing is possible.  
PVC apron.

**Other/Type:** Eye wash facility should be in close proximity.  
Emergency shower should be in close proximity.

**Ventilation requirements:** Ventilate adequately.  
As needed to stay below TLV.

**Exposure limit of material:** Not available for mixture, see the ingredients section.

## Section 9 : PHYSICAL AND CHEMICAL PROPERTIES

**Physical state:** Liquid.

**Appearance & odor:** Pale yellow.  
Penetrating odor.  
Heavy oily.

**Odor threshold (ppm):** 1 mg/m<sup>3</sup>

**Vapour pressure (mmHg):** 0.002 mmHg (40°C) 0.3mmHg (25°C).

**Vapour density (air=1):** 3.4

### Volatiles (%)

**By volume:** Not available.

**Evaporation rate  
(butyl acetate = 1):** Not available.

**Boiling point (°C):** 315°C–338°C

**Freezing point (°C):** –2°C (98% purity) –31°C (93% purity).

**pH:** (0.1 molar solution).  
<0.5

**Specific gravity @ 20 °C:** 1.84

**Solubility in water (%):** Complete.

**Coefficient of water\oil dist.:** Not available.

**VOC:** Not available.

## Section 10 : STABILITY AND REACTIVITY

**Chemical stability:** Stable under normal conditions.

**Conditions of instability:** Contact with incompatible substances.

**Hazardous polymerization:** May occur in the presence of incompatible materials.

**Incompatible substances:** Water  
Carbides.  
Fulminates.  
Picrates.  
Chlorates.  
Metals.  
Allyl chloride.  
Acetaldehyde.

**Hazardous decomposition products:** Cyanides.  
Hydrogen sulfide.  
This product may release flammable hydrogen gas when in contact with incompatible materials.  
Acetylene.

## Section 11 : TOXICOLOGICAL INFORMATION

**LD50 of product, species & route:** 2140 mg/kg rat oral.  
(estimated).

**LC50 of product, species & route:** Estimated.  
320 mg/m<sup>3</sup> mouse inhalation.  
510 mg/m<sup>3</sup> rat inhalation.

## Section 12 : ECOLOGICAL INFORMATION

**Environmental toxicity:** No data at this time.

**Environmental fate:** No data at this time.

## Section 13 : DISPOSAL CONSIDERATIONS

**Waste disposal:** In accordance with municipal, provincial and federal regulations.  
May be incinerated.

## Section 14 : TRANSPORT INFORMATION

**TDG classification:** SULPHURIC ACID SOLUTION  
UN1830  
Class 8  
PG II.



**Special shipping information:** See transportation information.

## Section 15 : REGULATORY INFORMATION

**WHMIS classification:**

D1A, D2A, E.



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

**Section 16 : OTHER INFORMATION**

**Supplier MSDS date:** 2008/08/12

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