



شركة قطر للأحماض الكيماوية

## Q-ACIDS

# MATERIAL SAFETY DATA SHEET

MSDS

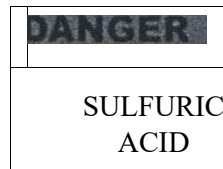
Qatar Acids Company (Q-Acids)

## **SULPHURIC ACID**

### 1. GENERAL INFORMATION

Product Name : Sulphuric Acid 98 %, Technical  
Country of origin : QATAR—QATAR ACIDS co  
UN Number : 1830  
DO Class : 8  
Packing Group : 11  
Poisons

Hazard pictogram



### 2. PHYSICAL CHARACTERISTICS

Appearance: Colourless, Hygroscopic Liquid, Denser than Water, Choking fumes if heated. Specific Gravity: 1.84 mg/ml Boiling point • 340 deg.

Freezing point • 10 deg C

### 3. CHEMICAL CHARACTERISTICS

Solubility Miscible with water and alcohol  
Corrosive Characteristic • Corrosive to steel at concentration below 95%  
pH Value 0.3, IN Solution  
Formula H<sub>2</sub>S<sub>04</sub>  
Molecular Weight • 98.08  
Other information: Soluble in water in all proportion, soluble in most organic solvents (May react).

Can kill if swallowed, will cause severe damage to mucous membranes, May

#### 4. HEALTH HAZ ARAD DATA

Cause severe burns to the mouth and stomach. Corrosive to eyes, it may cause corneal burns. Highly corrosive to skin, (Cause severe burns) Harmful for inhalation (High concentration vapor can cause sever irritation of the respiratory)

#### 5. TOXICOLOGY

LD 85-LC50 mixture: Oral LD 50 (RATS) is 2140 mg/kg (H2S04)

Rote of entry: Inhalation, Skin, Ingestion.

Signs/Symptoms of overexposure: If ingested: causes mouth, throat, esophagus and stomach burns.

Gastric perforation and even death.

#### 6. First Aid

First Aid procedure

Swallowed: Rinse mouth thoroughly with water immediately, give water to drink. Seek immediately for medical assistance.

Eyes and Skin: Flush with water for at least 15 minutes holding eyes open.

Inhaled: Remove for fresh air and provide oxygen if needed, allow patient to assume most comfortable position and keep warm.

Ingestion: Do not induce vomiting, if conscious drink milk. Never give anything by mouth to an unconscious person.

#### 7. Fire / Explosion Hazard

Decomposes on heating, emitting toxic fumes (Sulphur oxides)

The product is considered as non-combustible.

Fire fighters to wear self-contained breathing apparatus.

Extinguishing media: Water from distance, CO<sub>2</sub>, dry chemicals. Use water spray to cool fire exposed contain.

For fire fitting procedure: Wear full protective clothing and safety, continue breathing apparatuses with full face piece operated in the positive pressure mode.

The following personal protective equipment must be worn:

- Overalls or similar protective apparel.
- Safety glasses, goggles or face shield as appropriate

## 8. PERSONAL PROTECTION

- Rubber gloves and boots • Elbow length PVC gloves
- Splash apron
- Wash contaminated clothing and protective equipment before storing/re-using avoid all contact.

## 9. OTHER PRECAUTIONS

Prolonged exposure to mists and vapours can cause erosion of teeth, chronic irritation of eyes, nose and throat and chronic inflammation of airways, 98% concentration acid cause severe kind of burns or short contact and is very injurious to eyes. Exposure to strong inorganic acid mists containing sulphuric acid caused is carcinogenic to humans.

## 10. REACTIVITY DATA

Stability: Highly stable products

Condition to avoid: Water and steam

Material to avoid: Organic material, chlorates, carbides, metals, strong bases.

Decomp products: Sulphur oxides, hydrogen may release corrosive or highly irritating fumes and smoke. Product is highly corrosive to most metals in presence of moisture, liberating hydrogen gases (potential explosion).

Reacts violently or explosively with a wide range of organic chemicals, alcohol, carbides, chlorates, picrate's, nitrates, metals and other combustibles.

## 11. PRECAUTIONS FOR SAFE USE

If material is released: wear acid-resistant clothing, boots, gloves and face shield, ventilate area.

For any leak: stop material flow, then absorb spills with dry sand, earth and vermiculate. Carefully neutralize with soda ash, sodium bicarbonate and lime.

Don't discharge to sewer neutralizing agent: Lime and soda

Precaution: handling/storing. Store in a cool, dry place in tightly closed container, wearing gloves while handling. Wash thoroughly after handling and before eating or drinking.

Remove contaminated clothing promptly. Keep out of sight of children.

Respiratory protection: Not required under normal conditions if working in a confined area or misting is occurring, use air respirator for acid.

Ventilation: Good general ventilation is sufficient.

Protective gloves

Eye protection: safety goggles in clean-up of spills

Other protective equipment: eye wash stations, quick drench showers and impervious clothing.

## 12. CONTROL MEASURE

Work hygiene: Observe good personal hygiene practices and recommended procedures.

Do not contaminate clothing or footwear.

## 13. SPILLS AND DISPOSAL

Shut off all possible sources of ignition.

Clear area of all unprotected personnel.

Contain using sand and earth — prevent run off into drains and waterways.

For large spills notify emergency services.

In the event of a small spill: neutralize using remaining product with lime or soda ash, adjusting pH to 6-10.

Flush to sewer as a greatly diluted solution.

Wear full protective clothing

Self-contained breathing apparatus may be needed for prolonged period of exposure.

Observe local regulation.

## 14. STORAGE DATE

Store in good ventilated area, cool dry place.

Area should be free from all unprotected personnel.

Keep away all kinds of bases from storage area.

## 15. TRANSPORTATION DATA

Carbon steel or stiles steel container can be used for transportation; polyethylene containers can be used for storing of small quantities.

DOT proper shipping name: Sulphuric Acid

DOT CLASS: 8

DOT ID NUMBER: UN 1830

DOT Packing group: II

Manufacturer: Qatar Acids

Company

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EMERGENCY TELEPHONE NO: For spill, leak, fire, exposure, or accident

Call CHEMTREC day or night

## 16. CONTACT FOR EMERGENCY

Within USA and Canada: 1-800-424-9300

Outside USA and Canada: +1 703-741-5970 and +1-703-527-3387

(collect calls accepted)

It is the responsibility of the person receiving the product to refer to the totality of the official documents concerning the use, the possession and the handling of the product. It is also the responsibility of the handlers of the product to pass on to any subsequent persons who will come into contact with the product (usage, storage, cleaning of containers, other processes) the totality of the information contained within this safety data sheet and necessary for safety at work, the protection of health and the protection of environment.

This MSDS sheet summarizes our best knowledge of the health and safety hazards information of Sulphuric Acid. Each user should read this MSDS and consider the information in the context of how the product will be handled and used in the workplace.

END OF MSDS