



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  
DG Class : 8  
Packing Group : II  
Poisons : S6

#### **2. PHYSICAL CHARACTERISTICS**

Appearance: Colorless, 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, 1 N Solution  
Formula : H<sub>2</sub>SO<sub>4</sub>  
Molecular Weight: 98.08  
Other information: Soluble in water in all proportion, soluble in most organic solvents (May react).

#### **4. HEALTH HAZARD DATA**

Can kill if swallowed, will cause sever damage to mucous membranes, May  
Cause sever burns to the mouth and stomach.  
Corrosive to eyes, it may cause corneal burns.  
Highly corrosive to skin. (Cause sever burns)  
Harmful for inhalation (High concentration vapor can cause sever irritation of the respiratory)

## 5.TOXICOLOGY

LD85-LC50 Mixture: Oral LD50 (RATS) is 2140 Mg/Kg (H2SO4)

Route of entry: Inhalation, Skin, ingestion

Signs/Symptoms of Overexposure: If ingested: Causes Mouth, Throat Esophagus, 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: Flash with water for at least 15 minutes Hold eyes open.

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

Ingestion: Don't 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 Fighting procedure: Wear full protective clothing and safety- continued breathing apparatuses with full Face piece operated in the positive pressure mode.

## 8. PERSONAL PROTECTION

The following personal protective equipment must be worn:

- Overalls or similar protective apparel.
- Safety glasses, goggles or face shield as appropriate
- Rubber boots
- Elbow- length PVC glove
- Splash apron
- Wash contaminated clothing and protective equipment before storing/re-using avoid all contact.

## 9. OTHER PRECAUTIONS

Prolonged exposure to mists and vapors 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 Humana according to (International Agency for Research on Cancer" ARC"

## 10. REACTIVITY DATA

Stability: Highly stable product

Condition to avoid: Water, Steam

Material to avoid: Organics Material, Chlorates, Carbides, Picrates, Metals, Strong Bases. Hazardous Decamp 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, picrates, nitrates, metals and other combustibles

## 11. PRECAUTION FOR SAFE AND 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 vermiculite. Carefully neutralize with soda ash, sodium bicarbonate and lime.

Don't discharge to sewer Neutralizing Agent: Lime or Soda

Precaution- Handling /storing: Storing- Store in a cool, dry place in tightly closed container. wear clothes while handling.

Other precautions: Avoid breathing vapor or mists. don't get in eyes, on skin or on clothing. Wash thoroughly after handling and before eating or drinking.

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

## 12. CONTROL MEASURE

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

Ventilation: Good general ventilation is sufficient.

Protective Gloves: Rubber gloves

Eye Protection: Safety Goggles in cleanup of spills.

Other protective Equipments: Eye wash stations, quick drench shower and impervious clothing.

Work Hygienic practices: Observe good personal hygiene practices and recommended procedures. Do not contaminated 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 remaining product with lime or soda ash, adjusting pH to 6-10.

Flush to sewer as a greatly diluted solution.

Wear full protective clothing (See Personal Protection /Ventilation section)

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

Observe local regulations.

### **14. STORAGE DATE**

Store in well ventilation area, cool dry place.

Area should be free from all unprotected personnel

Keep away all kind 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

### **16. CONTACT FOR EMERGENCY**

Emergency, Tel / Fax : Tel (44760346 – 44760339- 44760340)

Fax (44760341)

This MSDS Sheet summaries our best knowledge of the health and safety hazard information of Sulphuric Acid.

Each used 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**