



MATERIAL SAFETY DATA SHEET

MSDS

Qatar Acids Company (Q-Acids)

SULPHURIC ACID 50%

1. GENERAL INFORMATION

Product Name : Sulphuric Acid 50 %, Technical
Country of origin : QATAR—QATAR ACIDS Co
UN Number : 1830
DO Class : 8
Packing Group : II
Poisons : S6

Hazard pictogram :



2. PHYSICAL CHARACTERISTICS

Appearance: Colourless, Denser than Water, Choking fumes if heated. Specific Gravity: 1.5 - 1.52 mg/cm³

3. CHEMICAL CHARACTERISTICS

Solubility : Miscible with water and alcohol
Corrosive Characteristic : Corrosive to steel
Ph Value : 0.3, 1N Solution
Formula : H₂SO₄
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 severe damage to mucous membranes, May

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 severe irritation of the respiratory)

5. TOXICOLOGY

LD 85-LC50 mixture: Oral LD 50 (RATS) is 2140 mg/Kg (H₂SO₄)

Route 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, CO₂, dry chemicals. Use water spray to cool fire exposed contain.

For fire fighting procedure: Wear full protective clothing and safety, continue 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 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, 50% 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.

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. 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.

12. CONTROL MEASURE

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.

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 cannot be used for transportation; only polyethylene containers can be used for transportation & storing

DOT proper shipping name: Sulphuric Acid

DOT CLASS: 8

DOT ID NUMBER: UN 1830

DOT Packing group: II

16. CONTACT FOR EMERGENCY

Manufacturer : Qatar Acids Company

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

Call CHEMTREC day or night

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