



UNCHING INDUSTRY CO., LTD.

109/20 Moo 9, Setthakit 1 Rd., T. Suanluang, A.Krathumbaen, Samutsakhon 74110.

Tel: 02 - 810 - 1345 Fax: 02 - 810 - 1346

SAFETY DATA SHEET

SULFURIC ACID 50%

1. Identification of the substance/preparation and of the company/undertaking

Identification of the product

Product name: SULFURIC ACID 50%

Manufacturer/supplier identification

Company: UNCHING INDUSTRY CO., TLD
 109/20 Moo 9, Setthakit 1 Rd., T. Suanluang, A.Krathumbaen,
 Samutsakhon 74110

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2. Hazards identification

GHS classification of the substance/mixture

Skin corrosion Category 1A
 Serious eye damage Category 1

Pictogram (s)



Signal word:

Danger

Hazard Statement(s)

May be corrosive to metals
 Causes severe skin burns and eye damage

3. Composition/information on ingredients

ชื่อผลิตภัณฑ์	CAS #	Weight Percentage
SULFURIC ACID	7664-93-9	50
WATER	7732-18-5	50

Molecular formula: H_2SO_4

4. First aid measures

After inhalation: fresh air. Summon doctor.

After skin contact: wash off with plenty of water. Dab with polyethylene glycol 400. Immediately remove contaminated clothing.

After eye contact: rinse out with plenty of water for at least 10 minutes with the eyelid held wide open. Immediately summon eye specialist.

After swallowing: make victim drink plenty of water (if necessary several litres), avoid vomiting (risk of perforation!). Immediately summon doctor. Do not attempt to neutralize.

5. Fire-fighting measures

Suitable extinguishing media:

In adaption to materials stored in the immediate neighbourhood.

Special risks:

Development of hazardous combustion gases or vapours possible in the event of fire. Hydrogen may form upon contact with metals (danger of explosion!).

The following may develop in event of fire: sulfur oxides

Special protective equipment for fire fighting:

Do not stay in dangerous zone without suitable chemical protection clothing and self-contained breathing apparatus.

Other information:

Non-combustible. Contain escaping vapours with water.

6. Accidental release measures

Person-related precautionary measures:

Do not inhale vapours/aerosols. Avoid substance contact.

Procedures for cleaning / absorption:

Take up with liquid-absorbent material (e.g. Chemisorb®). Forward for disposal. Clean up affected area.

Environmental-protection measures:

Do not allow to enter sewerage system.

Additional notes:

Render harmless: neutralize with diluted sodium hydroxide solution or by throwing on lime, lime sand, or sodium carbonate.

7. Handling and storage**Handling:**

No further requirements.

Storage

Tightly closed. Dry. In a well-ventilated place. Storage temperature: no restrictions.

8. Exposure controls/personal protection**Personal protective equipment:**

Respiratory protection: required when vapours/aerosols are generated.

Eye protection: required

Hand protection: required

Protective clothing should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled. The resistance of the protective clothing to chemicals should be ascertained with the respective supplier.

Other protective equipment: Acid-resistant protective clothing.

Industrial hygiene: Change contaminated clothing and immerse in water. Apply skin-protective barrier cream. Wash hands and face after working with substance.

9. Physical and chemical properties

Form: liquid

Colour: colourless

Odour:		odourless
pH value		not available
Viscosity	dynamic (20 °C)	26.9 mPa*s
Melting temperature		-15 °C
Boiling temperature		330 °C
Ignition temperature		not available
Flash point		not available
Explosion limits	lower	not available
	upper	not available
Vapour pressure	(20 °C)	~ 0.0001 mbar
Density	(20 °C)	1.39 g/cm ³
Solubility in	water (20 °C)	soluble

10. Stability and reactivity

Conditions to be avoided

Strong heating.

Substances to be avoided

water , alkali metals , alkali compounds , ammonia , alkaline earth metals , alkalis , acids , alkaline earth compounds , metals , metal alloys , phosphorus oxides , phosphorus , hydrides , halogen-halogen compounds , oxyhalogenic compounds , permanganates , nitrates , carbides , combustible substances , organic solvents , acetylidene , nitriles , organic nitro compounds , anilines , peroxides , picrates , nitrides , lithium silicide

Hazardous decomposition products

in the event of fire : sulfur oxides

Further information

hygroscopic ; has a corrosive effect ; incompatible with metals , animal/vegetable tissues

11. Toxicological information

Acute toxicity

LD₅₀ (oral, rat): 2140 mg/kg (Using 25 % solution) ;

LC₅₀ (inhalation, rat): 510 mg/m³ /2 h (calculated on the pure substa)

Toxicologic values are not available due to other dangerous properties of the substance.

Further toxicological information

After inhalation of aerosols: damage to the affected mucous membranes.

After skin contact: severe burns with formation of scabs.

After eye contact: burns, corneal lesions.

After swallowing: severe pain (risk of perforation!), nausea, vomiting and diarrhoea. After a latency period of several weeks possibly pyloric stenosis.

Further data

The product should be handled with the care usual when dealing with chemicals.

12. Ecological information

Behavior in environmental compartments:

Evaluation number (FRG) (fish): 3.1 (calculated on the pure substa)

Ecotoxic effects:

Biological effects: Toxic for aquatic organisms Harmful effect due to pH shift. Toxic effect on fish and algae. Caustic even in diluted form. Does not cause biological oxygen deficit. Endangers drinking-water supplies if allowed to enter soil and/or waters in large quantities. Neutralization possible in waste water treatment plants.

Further ecologic data:

The following applies to sulfuric acid:

Biological effects: toxic for aquatic organisms: LC_{50} 96 h. >10 mg/l; fish: lethal as from 1.2 mg/l; as from 6.3 mg/l lethal in 24 h. Harmful effect due to pH shift.

Do not allow to enter water, waste water, or soil!

13. Disposal considerations

Product: There are no uniform EC Regulations for the disposal of chemicals or residues. Chemical residues generally count as special waste. The disposal of the latter is regulated in the EC member countries through corresponding laws and regulations. We recommend that you contact either the authorities in charge or approved waste disposal companies which will advise you on how to dispose of special waste.

Packaging: Disposal in compliance with official regulations. Handle contaminated packaging in the same way as the substance itself. If not officially specified differently, non-contaminated packaging may be treated like household waste or recycled.

14. Transport information

UN Number: 2796

Class: 8

PG: II

Proper Shipping Name: Sulfuric acid

15. Regulatory information

Labelling according to EC Directives

Symbol:	C	Corrosive immediately and show this container or label.
R-phrases:	R 35	Causes severe burns.
S-phrases:	S 26-30-45	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Never add water to this product. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

German regulations

Water pollution class	1	(slightly polluting substance)
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16. Other information

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