

# Sulfuric acid, 95 - 97%, ExpertQ®, ISO

## Identification

H<sub>2</sub>SO<sub>4</sub>  
M = 98,08 g/mol  
CAS [7664-93-9]  
EC number: 231-639-5  
Taric code: 2807 00 00

## Synonyms

Sulphuric acid

## Applications

analytical chemistry, laboratory reagent, acidifying agent, synthesis of organic products, nitrogen determinations.

## Specifications

assay (acidimetric).....	95,0 - 97,0 %	iron (Fe).....	max. 0,1 ppm
colour (Hazen).....	max. 10	lead (Pb).....	max. 0,01 ppm
chlorides (Cl).....	max. 0,00001 %	lithium (Li).....	max. 0,01 ppm
nitrates and nitrites (as NO <sub>3</sub> ).....	max. 0,00002 %	magnesium (Mg).....	max. 0,05 ppm
phosphates (as PO <sub>4</sub> ).....	max. 0,00005 %	manganese (Mn).....	max. 0,01 ppm
aluminium (Al).....	max. 0,05 ppm	molybdenum (Mo).....	max. 0,02 ppm
ammonium (NH <sub>4</sub> ).....	max. 0,0001 %	nickel (Ni).....	max. 0,02 ppm
arsenic (As).....	max. 0,01 ppm	platinum (Pt).....	max. 0,1 ppm
barium (Ba).....	max. 0,05 ppm	potassium (K).....	max. 0,1 ppm
beryllium (Be).....	max. 0,01 ppm	silver (Ag).....	max. 0,01 ppm
bismuth (Bi).....	max. 0,05 ppm	sodium (Na).....	max. 0,3 ppm
boron (B).....	max. 0,05 ppm	strontium (Sr).....	max. 0,01 ppm
cadmium (Cd).....	max. 0,01 ppm	thallium (Tl).....	max. 0,02 ppm
calcium (Ca).....	max. 0,1 ppm	tin (Sn).....	max. 0,05 ppm
chromium (Cr).....	max. 0,02 ppm	titanium (Ti).....	max. 0,02 ppm
cobalt (Co).....	max. 0,01 ppm	vanadium (V).....	max. 0,01 ppm
copper (Cu).....	max. 0,01 ppm	zinc (Zn).....	max. 0,05 ppm
gallium (Ga).....	max. 0,05 ppm	zirconium (Zr).....	max. 0,02 ppm
germanium (Ge).....	max. 0,02 ppm	substances reducing KMnO <sub>4</sub> .....	passes test
gold (Au).....	max. 0,05 ppm	residue on ignition.....	max. 0,0003 %
indium (In).....	max. 0,05 ppm		

## Physical data

- Density: 1,84 g/cm<sup>3</sup>
- Solub. in water: (20 °C): miscible
- Melting point: ~ -15 °C
- Boiling point: ~ 310 °C
- Vapour pressure: (20 °C) ~ 0,0001 hPa
- pH(49 g/l H<sub>2</sub>O, 25 °C) 0,3
- Hygroscopic

## Safety - GHS

Signal Word: Danger

### Hazard Statements:

H314: Causes severe skin burns and eye damage.



### Precautionary Statements:

- P260: Do not breathe dust / fume / gas / mist / vapours / spray.  
P303+P361+P353: IF ON SKIN (or hair): Remove / Take off immediately all contaminated clothing. Rinse skin with water / shower.  
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P321: Specific treatment (see on this label).  
P405: Store locked up.  
P501a: Dispose of contents / container in accordance with local / regional / national / international regulations.

## Toxicological data

- LD 50 (oral, rat): 2140 mg/kg
- MAK: 0,1 mg/m<sup>3</sup>
- WGK: 1
- Poison class CH (Swiss): 2

**Transport/storage**

- ADR: 8 C1 II • UN 1830 • SULPHURIC ACID
- IMDG: 8 II • UN 1830 • SULPHURIC ACID
- IATA/ICAO: 8 II • UN 1830 • SULPHURIC ACID
- PAX: 809
- CAO: 813
- Store between 15°C and 25°C