

Sulfuric acid, 95 - 98%, for analysis, ExpertQ®, ACS, ISO, max. 0,0000005% Hg

Identification

H_2SO_4
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 - 98,0 %	heavy metals (as Pb).....	max. 1 ppm
appearance.....	passes test	iron (Fe).....	max. 0,1 ppm
colour (Hazen).....	max. 10	lead (Pb).....	max. 0,02 ppm
density (20°/20°).....	1,834 - 1,837	lithium (Li).....	max. 0,01 ppm
chlorides (Cl).....	max. 0,00001 %	magnesium (Mg).....	max. 0,05 ppm
nitrites (NO ₂).....	max. 0,00002 %	manganese (Mn).....	max. 0,01 ppm
nitrites and nitrites (as NO ₃).....	max. 0,2 %	mercury (Hg).....	max. 0,005 ppm
phosphates (as PO ₄).....	max. 0,00005 %	molybdenum (Mo).....	max. 0,05 ppm
aluminium (Al).....	max. 0,05 ppm	nickel (Ni).....	max. 0,02 ppm
ammonium (NH ₄).....	max. 0,0002 %	potassium (K).....	max. 0,1 ppm
arsenic (As).....	max. 0,01 ppm	silver (Ag).....	max. 0,02 ppm
barium (Ba).....	max. 0,05 ppm	sodium (Na).....	max. 0,5 ppm
beryllium (Be).....	max. 0,01 ppm	strontium (Sr).....	max. 0,02 ppm
bismuth (Bi).....	max. 0,1 ppm	thallium (Tl).....	max. 0,05 ppm
cadmium (Cd).....	max. 0,02 ppm	titanium (Ti).....	max. 0,1 ppm
calcium (Ca).....	max. 0,2 ppm	vanadium (V).....	max. 0,01 ppm
chromium (Cr).....	max. 0,05 ppm	zinc (Zn).....	max. 0,05 ppm
cobalt (Co).....	max. 0,01 ppm	zirconium (Zr).....	max. 0,1 ppm
copper (Cu).....	max. 0,01 ppm	oxidisable substances.....	passes test
germanium (Ge).....	max. 0,05 ppm	substances reducing KMnO ₄	passes test
		residue on ignition.....	max. 0,0005 %

Physical data

- Density: 1,84 g/cm³
- 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 H₂O, 25 °C) 0,3
- Hygroscopic

Safety - GHS

Signal Word: Danger

Hazard Statements:

- H290: May be corrosive to metals.
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.
P310: Immediately call a POISON CENTER or doctor / physician.
P405: Store locked up.
P501a: Dispose of contents / container in accordance with local / regional / national / international regulations.

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
- 10°C - 30°C