

Identification

H₂SO₄
 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 - 98 %	iron (Fe).....	max. 0,00001 %
appearance of solution.....	passes test	lead (Pb).....	max. 0,000002 %
colour (Hazen).....	max. 10	lithium (Li).....	max. 0,000001 %
chlorides (Cl).....	max. 0,00001 %	magnesium (Mg).....	max. 0,000005 %
nitrates (NO ₃).....	max. 0,00002 %	manganese (Mn).....	max. 0,000001 %
phosphates (as PO ₄).....	max. 0,00005 %	mercury (Hg).....	max. 0,0000005 %
aluminium (Al).....	max. 0,000005 %	molybdenum (Mo).....	max. 0,000005 %
ammonium (NH ₄).....	max. 0,0002 %	nickel (Ni).....	max. 0,000002 %
arsenic (As).....	max. 0,000001 %	potassium (K).....	max. 0,00001 %
barium (Ba).....	max. 0,000005 %	silver (Ag).....	max. 0,000002 %
beryllium (Be).....	max. 0,000001 %	sodium (Na).....	max. 0,00005 %
bismuth (Bi).....	max. 0,00001 %	strontium (Sr).....	max. 0,000002 %
cadmium (Cd).....	max. 0,000002 %	thallium (Tl).....	max. 0,000005 %
calcium (Ca).....	max. 0,00002 %	titanium (Ti).....	max. 0,00001 %
chromium (Cr).....	max. 0,000005 %	vanadium (V).....	max. 0,000001 %
cobalt (Co).....	max. 0,000001 %	zinc (Zn).....	max. 0,000005 %
copper (Cu).....	max. 0,000001 %	zirconium (Zr).....	max. 0,00001 %
germanium (Ge).....	max. 0,000005 %	substances reducing KMnO ₄	passes test
heavy metals (as Pb).....	max. 0,0001 %	residue on ignition.....	max. 0,0005 %

Packaging
Packaging Code

1 l  AC20971000
 2,5 l  AC20972500

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:

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/m³
- 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