

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).....	95,0 - 97,0 %	nitrites and nitrites (as NO ₃).....	max. 0,2 ppm
appearance.....	clear and colourless	ammonium (NH ₄).....	max. 2 ppm
colour (Hazen).....	max. 10	arsenic (As).....	max. 0,02 ppm
density (20°/20°).....	1,834 - 1,837	copper (Cu).....	max. 0,1 ppm
oxidisable substances.....	passes test	iron (Fe).....	max. 0,5 ppm
identification sulfates.....	passes test	lead (Pb).....	max. 0,1 ppm
chlorides (Cl).....	max. 0,5 ppm	heavy metals (as Pb).....	max. 2 ppm
nitrites (NO ₃).....	max. 0,5 ppm	substances reducing KMnO ₄	max. 5 ppm
		residue on ignition.....	max. 0,001 %

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