

**Iron(II) sulfate heptahydrate, for analysis, ExpertQ®, ACS, ISO, Reag.
Ph Eur****Identification**

FeSO₄·7H₂O
M = 278,02 g/mol
CAS [7782-63-0]
EC number: 231-753-5
Taric code: 2833 29 80

Synonyms

Iron vitriol

Applications

analytical chemistry, determining COD.

Specifications

assay (cerimetric).....	98,0 - 105,0 %	chromium (Cr).....	max. 50 ppm
assay (KMnO ₄).....	min. 99,0 %	cobalt (Co).....	max. 25 ppm
Identification iron.....	passes test	copper (Cu).....	max. 25 ppm
Identification sulfates.....	passes test	iron (III) (Fe (III)).....	max. 0,025 %
insoluble matter.....	max. 0,01 %	lead (Pb).....	max. 25 ppm
pH (5 %, H ₂ O).....	3,0 - 4,0	magnesium (Mg).....	max. 20 ppm
chlorides (Cl).....	max. 10 ppm	manganese (Mn).....	max. 0,05 %
phosphates (as PO ₄).....	max. 10 ppm	nickel (Ni).....	max. 50 ppm
total nitrogen (as N).....	max. 0,001 %	potassium (K).....	max. 20 ppm
arsenic (As).....	max. 2 ppm	sodium (Na).....	max. 200 ppm
calcium (Ca).....	max. 10 ppm	zinc (Zn).....	max. 50 ppm
		substances not precipitated by ammonium hydroxide	max. 0,1 %

Physical data

- Appearance: crystals, turkish blue, up to 4mm
- Spec. Density: 1,89 g/cm³
- Bulk density: ~ 600 kg/m³
- Solub. in water: (20 °C): 665 g/l
- Melting point: > 60 °C (release of crystalline water)
- pH(50 g/l H₂O, 20 °C) 3 - 4

Safety - GHS

Signal Word: Warning

Hazard Statements:

- H302: Harmful if swallowed.
H315: Causes skin irritation.
H319: Causes serious eye irritation.

**Precautionary Statements:**

- P280: Wear protective gloves / protective clothing / eye protection / face protection.
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).
P301+P312: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P332+P313: If skin irritation occurs: Get medical advice / attention.
P501a: Dispose of contents / container in accordance with local / regional / national / international regulations.

Transport/storage

- 10°C - 30°C