

**Cobalt(II) sulfate heptahydrate, for analysis, ExpertQ®****Identification**

CoSO<sub>4</sub>·7H<sub>2</sub>O  
M = 281,10 g/mol  
CAS [10026-24-1]  
EC number: 233-334-2  
Taric code: 2833 29 30

**Applications**

analytical chemistry, laboratory reagent, in porcelain industry, pigment, manufacturing of inks.

**Specifications**

assay (complexometric).....	min. 99 %	lead (Pb).....	max. 0,001 %
insoluble in water.....	passes test	magnesium (Mg).....	max. 0,005 %
chlorides (Cl).....	max. 0,001 %	manganese (Mn).....	max. 0,0025 %
total nitrogen (as N).....	max. 0,002 %	nickel (Ni).....	max. 0,025 %
calcium (Ca).....	max. 0,005 %	potassium (K).....	max. 0,005 %
copper (Cu).....	max. 0,001 %	sodium (Na).....	max. 0,01 %
iron (Fe).....	max. 5 ppm	zinc (Zn).....	max. 0,005 %

**Physical data**

- Appearance: crystals, red or garnet
- Spec. Density: (25 °C) 1,95 g/cm<sup>3</sup>
- Bulk density: ~ 900 kg/m<sup>3</sup>
- Solub. in water: (20 °C): 260 g/l
- Melting point: 98 °C
- pH(100 g/l H<sub>2</sub>O, 20 °C) ~ 4

**Safety - GHS**

**Signal Word:** Danger

**Hazard Statements:**

- H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
H350: May cause cancer.  
H400: Very toxic to aquatic life.  
H410: Very toxic to aquatic life with long lasting effects.  
H302: Harmful if swallowed.  
H317: May cause an allergic skin reaction.

**Precautionary Statements:**

- P284: Wear respiratory protection.  
P261: Avoid breathing dust / fume / gas / mist / vapours / spray.  
P280: Wear protective gloves / protective clothing / eye protection / face protection.  
P321: Specific treatment (see on this label).  
P405: Store locked up.  
P501a: Dispose of contents / container in accordance with local / regional / national / international regulations.

**Transport/storage**

- ADR: 9 M7 III • UN 3077 • ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.(Cobalt(II) sulfate heptahydrate)
- IMDG: 9 III • UN 3077 • ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.(Cobalt(II) sulfate heptahydrate)
- IATA/ICAO: 9 III • UN 3077 • ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.(Cobalt(II) sulfate heptahydrate)
- PAX: 911
- CAO: 911
- 10°C - 30°C