

Magnesium sulfate heptahydrate, for analysis, ExpertQ®, ACS, Reag. Ph Eur

Identification

$\text{MgSO}_4 \cdot 7\text{H}_2\text{O}$
M = 246,48 g/mol
CAS [10034-99-8]
EC number: 231-298-2
Taric code: 2833 21 00

Synonyms

Bitter salt, Epsom salt, Sulfuric acid magnesium salt heptahydrate

Applications

analytical chemistry, manufacture of dyes, in fertilizer compositions, in explosive compositions, cosmetics.

Specifications

assay (complexometric, on dried sample).....	99 - 102 %	arsenic (As).....	max. 0,0002 %
identity.....	passes test	calcium (Ca).....	max. 0,005 %
appearance of solution.....	passes test	copper (Cu).....	max. 0,0001 %
insoluble in water.....	max. 0,005 %	heavy metals (as Pb).....	max. 0,0005 %
pH (5 %, H_2O).....	5,0 - 8,2	iron (Fe).....	max. 0,0001 %
acidity or alkalinity.....	passes test	lead (Pb).....	max. 0,0001 %
chlorides (Cl).....	max. 0,0003 %	manganese (Mn).....	max. 0,0005 %
nitrites (NO_2).....	max. 0,002 %	potassium (K).....	max. 0,001 %
total nitrogen (as N).....	max. 0,002 %	sodium (Na).....	max. 0,001 %
ammonium (NH_4).....	max. 0,002 %	strontium (Sr)	max. 0,005 %
		loss on ignition (400°C).....	48 - 52 %

Physical data

- Spec. Density: 1,68 g/cm³
- Bulk density: ~ 900 kg/m³
- Solub. in water: (20 °C): 710 g/l
- pH(50 g/l H_2O , 20 °C) 5,0 - 8,2

Transport/storage

- 5°C - 30°C