

IdentificationMgSO₄·7H₂O

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, in pharma industry.

Specifications

assay (complexometric, referred to dried sample) 99,0 - 100,5 %	acidity or alkalinity..... passes test
assay (complexometric, on ignited substance)... 99,0 - 100,5 %	chlorides (Cl)..... max. 0,014 %
Identification magnesium..... passes test	arsenic (As)..... max. 2 ppm
Identification sulfates..... passes test	iron (Fe)..... max. 20 ppm
appearance of solution..... clear and colourless	selenium (Se)..... max. 30 ppm
pH (5 %, H ₂ O)..... 5,0 - 9,2	loss on drying 48,0 - 52,0 %
	loss on ignition (450 °C)..... 40,0 - 52,0 %

Physical data

- Appearance: crystals, colourless or white
- Spec. Density: 1,68 g/cm³
- Bulk density: ~ 900 kg/m³
- Solub. in water: (20 °C): 710 g/l
- pH(50 g/l H₂O, 20 °C) 5,0 - 8,2

Transport/storage

- 5°C - 30°C