

**Potassium dihydrogen phosphate, ExpertQ®, ACS, ISO, Reag. Ph
Eur****Identification**

KH_2PO_4
M = 136,09 g/mol
CAS [7778-77-0]
EC number: 231-913-4
Taric code: 2835 24 00

Synonyms

Potassium biphosphate, Potassium phosphate monobasic, Primary potassium phosphate, Mono-potassium phosphate

Applications

analytical chemistry; in buffer solutions.

Specifications

assay (acidimetric, on dried sample).....	min. 99,5 %	total nitrogen (as N).....	max. 0,001 %
assay (acidimetric, referred to dried sample).....	98,0 - 100,5 %	arsenic (As).....	max. 2 ppm
assay (acidimetric).....	min. 99,0 %	heavy metals.....	max. 0,001 %
identity (IR-spectrum).....	passes test	iron (Fe).....	max. 10 ppm
appearance of solution (10 %, H_2O).....	clear and colourless	sodium (Na).....	max. 0,005 %
insoluble in water.....	max. 0,01 %	reducing substances.....	passes test
pH (5 %, H_2O).....	4,2 - 4,5	loss on drying (105 °C, 2 h).....	max. 0,2 %
chlorides (Cl).....	max. 5 ppm	loss on drying (110 °C).....	max. 0,2 %
sulfates (SO_4).....	max. 0,003 %	loss on drying (130 °C).....	max. 2,0 %

Physical data

- Appearance: bright crystals, colourless
- Spec. Density: 2,34 g/cm³
- Bulk density: ~ 1200 kg/m³
- Solub. in water: (20 °C): 222 g/l
- Melting point: ~ 253 °C (decomposes)
- pH(50 g/l H_2O , 20 °C) ~ 4,4

Toxicological data

- WGK: 1
- Poison class CH (Swiss): 5