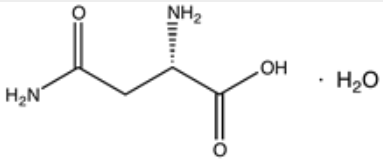
AS0015
L-Asparagine monohydrate, Pharmpur®, Ph Eur, BP

Identification

$C_4H_8N_2O_3 \cdot H_2O$
M = 150,14 g/mol
CAS [5794-13-8]
EC number: 200-735-9
Taric code: 2924 19 00



Synonyms

Asparaginic acid semiamide

Applications

in biochemistry, for pharmaceuticals synthesizing, in food industry, synthesis of organic products, in pharma industry.

Specifications

assay (titration with $HClO_4$, on dried sample)	99,0 - 101,0 %
identity (IR-spectrum)	passes test
Identification TLC	passes test
appearance of solution (2 %, H2O)	clear and colourless
specific rotation (20°/D, c=10, HCl 10%)	+ 33,7 ° - + 36,0 °
pH (2 %, H2O)	4,0 - 6,0
chlorides (Cl)	max. 200 ppm
sulfates (SO_4)	max. 200 ppm
ammonium (NH4)	max. 0,1 %
iron (Fe)	max. 10 ppm
residue on ignition	max. 0,1 %
loss on drying (60 °C, 24 h)	10,5 - 12,5 %
Related substances:	
aspartic acid	max. 0,5 %
2,2′-[(2Ξ,5Ξ)-3,6-dioxopiperazine-2,5-diyl]diacetamide	max. 0,1 %
any unspecified impurities	max. 0,05 %
total	max. 0,8 %

Physical data

- Bulk density: ~ 530 kg/m^3
- Solub. in water: (20 °C): 22 g/l
- Melting point: 215 - 217 °C (decomposes)
- pH(15 g/l H_2O, 20 °C) 4,1

Transport/storage

- 5°C - 30°C