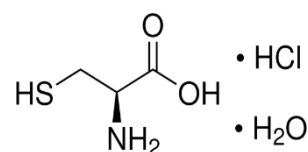


Product Specification

Product Name:

L-Cysteine hydrochloride monohydrate, *PurReagent Plus*, meets analytical specification of EP, JP & USP, 98.5 - 101.0 %

Product No.: PSR19518
Brand: PureSynth
CAS No.: 7048-04-6
Molecular Formula: $C_3H_7NO_2S \cdot HCl \cdot H_2O$
Molecular Weight: 175.63 g/mol



Test	Specification
Appearance	White to almost white crystalline powder or colorless crystals
Assay (By alkalimetric) (on dried basis)	98.5 - 101.0 %
pH (10 g/l, CO ₂ -free water)	1.3 - 2.3
Specific rotation (at 20/D, 80 g/l, HCl 250 mol/l, calc. on dried substance)	+5.5 to +7.0 °
Specific rotation (at 25/D, 80 g/l, HCl 6 mol/l, calc. on dried substance)	+5.7 to +6.8 °
Specific rotation (at 20/D, 80 g/l, HCl 6 mol/l, calc. on dried substance)	+6.0 to +7.5 °
Sulfate (SO ₄)	NMT 200 ppm
Heavy metals (as Pb)	NMT 10 ppm
Fe (Iron)	NMT 10 ppm
Related substances (TLC)	Complies
Related Compounds, total (TLC)	NMT 0.5 %
Ninhydrin-positive substances (LC) (impurity A (570 nm))	NMT 0.5 %
Ninhydrin-positive substances (LC) (any ninhydrin-positive impurity)	NMT 0.2 %
Ninhydrin-positive substances (LC) (ammonium (570 nm))	NMT 0.02 %
Ninhydrin-positive substances (LC) (total impurities)	NMT 1.0 %
Sulfated ash (600 °C)	NMT 0.1 %
Loss on drying (Vacuum < 2.0 kPa, P ₂ O ₅ , 20 h)	8.5 - 12.0 %
Identification by IR	Conforms to structure

Specification: PR-1.0-QA/418

The information represented here may/may not represent the entire product specification and application recommended by PureSynth Research Chemicals. This information is for the user scientists or trading community as a guide in their applications. The company claims no liability for misuse resulting due to wrong usage of the information above.

For queries on this Specifications, please contact our technical team at technical@pure-synth.com