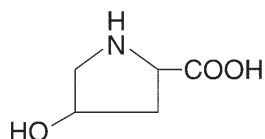


L-HYDROXYPROLINE

CAS NO. 51-35-4

MOLECULAR STRUCTURE AND FORMULA



$C_5H_9NO_3$: 131.13
N : 10.68%

DESCRIPTION

White crystals or crystalline powder
Odorless

IDENTIFICATION

Compare the infrared absorption spectrum of sample (dry, 1-2 mg) with that of the standard by diffuse reflection method.

SPECIFICATION AND PROCEDURE

State of solution (Transmittance)	Not Less Than 95.0%	Sec.-1 10%, H ₂ O
Specific rotation $[\alpha]_D^{20}$	-74.0 ~ -77.0°	Sec.-2 4%, H ₂ O
Ammonium (NH ₄)	Not More Than 0.020%	Sec.-3-(3), 0.5 g
Chloride (Cl)	Not More Than 0.020%	Sec.-4-(1), 0.50 g 0.24 ml of 0.01 mol/l HCl
Sulfate (SO ₄)	Not More Than 0.020%	Sec.-5 0.84 g 0.35 ml of 0.005 mol/l H ₂ SO ₄
Iron (Fe)	Not More Than 10 ppm	Sec.-6-(1), 2.0 g 2.0 ml of Standard solution
Heavy metals (Pb)	Not More Than 10 ppm	Sec.-7-(1), 2.0 g 2.0 ml of Standard solution
Arsenic (As ₂ O ₃)	Not More Than 1 ppm	Sec.-8-(1), 2.0 g 2.0 ml of Standard solution
Loss on drying	Not More Than 0.20%	Sec.-9-(1) 105°C, 3hr
Residue on ignition	Not More Than 0.10%	Sec.-10, 2 g
Foreign amino acids	Not Detected (TLC, 10 µg)	Sec.-13, Solvent L Nin A
Assay (dry basis)	99.0 ~ 101.0%	Sec.-15-(1), dry → 0.25 g 0.1 mol/l HClO ₄ 1 ml = 13.113 mg C ₅ H ₉ NO ₃

STORAGE

Controlled room temperature in tight container