

L-Alanyl-L-Glutamine

L-Alanyl-L-Glutamine contains not less than 97.0 percent and not more than 103.0 percent of $C_8H_{15}N_3O_4$, as L-Alanyl-L-Glutamine, calculated on the dried basis.

Description

White crystals or crystalline powder

Identification

Compare the infrared absorption spectrum of the sample with that of the standard by potassium bromide.

Specifications

Item	Limit	Test
Specific Rotation $[\alpha]_D^{20}$	+8.0 to +12.0°	AJI TEST 1 [Dried sample, C=2, H ₂ O]
State of solution (Transmittance)	Clear and colorless Not less than 95.0%	AJI TEST 2 [1.0g in 10mL of H ₂ O, spectrophotometer, 430nm, 10mm cell thickness]
Chloride (Cl)	Not more than 0.020%	AJI TEST 3 [0.5g, A, ref: 0.28mL of 0.01mol/L HCl]
Ammonium (NH ₄)	Not more than 0.02%	ANQC-0583 [Dionex Method, Sample CONC:1g/L]
Sulfate (SO ₄)	Not more than 0.030%	AJI TEST 5 [0.56g, (1), ref: 0.35mL of 0.005mol/L H ₂ SO ₄]
Iron (Fe)	Not more than 10ppm	AJI TEST 6 [0.75g, B-1, ref: 0.75mL of Iron Std.]
Heavy metals (Pb)	Not more than 10ppm	AJI TEST 7 [2.0g, (1), dissolve by warming, ref: 2.0mL of lead TS.]
Arsenic (As ₂ O ₃)	Not more than 1ppm	ANQC 1221 ICP-MS [1.0g, 50 ml]
Related Substances	Conforms L-Alanine NMT 1.0% L-Glutamine NMT 0.5% L-Glutamic Acid NMT 0.5%	ANQC-0624 [0.5g, 500 ml of H ₂ O]
Loss on drying	Not more than 1.50%	AJI TEST 11 [1g, at 105°C for 3 hours]
Residue on ignition (Sulfated)	Not more than 0.30%	AJI TEST 13 [1g, at 550°C to 650°C for 3 hours]
Assay	97.0 to 103.0%	ANQC-0584 [Dried sample, 200mg, A, 3mL of formic acid, 50mL of acetic acid (100), 0.1mol/L HClO ₄ 1mL=21.722mg C ₃ H ₇ NO ₂]
pH	5.0 to 6.0	AJI TEST 33 [10.0g in 100mL of H ₂ O]
Endotoxin	Less than 6.0 EU/g	ANQC-1046 [C=0.20 kinetic-turbidimetric technique]