



Test Method of Beta-alanine

We hereby confirm that our product **Beta-Alanine** test method is according to AJI97.

β-Alanine β-Ala

β-Alanine
3-Aminopropionic acid

$H_3N^+ - CH_2 - CH_2 - COO^-$

CAS No. 107-95-9 C₃H₇NO₂: 89.09
Nitrogen: 15.72%

β-Alanine, when dried, contains not less than 98.0 percent and not more than 101.0 percent of β-Alanine (C₃H₇NO₂).

Description: White crystals or crystalline powder; slightly sweet taste.
Solubility (H₂O, g/100g): 44 (20°)

Specifications

Item	Limit	Test
State of solution (Transmittance)	not less than 95.0	AJI TEST 2 [1.0g in 10mL of 2N HCl, spectrophotometer, 430nm, 10mm cell thickness]
Chloride (Cl)	not more than 0.04%	AJI TEST 3 [0.35g, A-1, ref: 0.40mL of 0.01N HCl]
Ammonium (NH ₄)	not more than 0.02%	AJI TEST 4 [A-1]
Sulfate (SO ₄)	not more than 0.048%	AJI TEST 5 [0.5g, (1), ref: 0.50mL of 0.01N H ₂ SO ₄]
Iron (Fe)	not more than 30ppm	AJI TEST 6 [0.5g, ref: 1.5mL of Iron Std. (0.01mg/mL)]
Heavy metals (Pb)	not more than 10ppm	AJI TEST 7 [2.0g, (1), ref: 2.0mL of Pb Std. (0.01mg/mL)]
Arsenic (As ₂ O ₃)	not more than 2ppm	AJI TEST 8 [1.0g, (1), ref: 2.0mL of As ₂ O ₃ Std.]
Other amino acids	chromatographically not detectable	AJI TEST 9 [test sample: 10μg, A-1-a]
Loss on drying	not more than 0.2%	AJI TEST 11 [at 105° for 3 hours]
Residue on ignition (sulfated)	not more than 0.2%	AJI TEST 13
Assay	98.0 to 101.0%	AJI TEST 14 [dried sample, 90mg, (1), 3mL of formic acid, 50mL of glacial acetic acid, 0.1N HClO ₄ , 1mL=8.909mg C ₃ H ₇ NO ₂]
pH	6.5 to 7.5	AJI TEST 33 [1.0g in 10mL of H ₂ O]

Storage: Preserve in tight containers at controlled room temperature.
Recommended limit: 2 years.