

Chem-Impex International, Inc.

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Certificate of Analysis

Catalogue Number	29801
Product	L-Glutamine USP from non-animal origin
Lot Number	000531-22029
	L-Gln-OH
CAS Number	56-85-9
Molecular Formula	C ₅ H ₁₀ N ₂ O ₃
Molecular Weight	146.15

Appearance	White crystalline powder
Anion	Chloride (Cl ⁻) : < 0.02% Sulfate (SO ₄ ²⁻) : < 0.02%
Cation	Iron (Fe) : < 10 ppm Lead (Pb) : < 0.1 ppm Arsenic (As) : < 0.1 ppm Cadmium(Cd) : < 0.1 ppm Mercury(Hg) : < 0.1 ppm
pH	5.1
Yeast and Mold	< 100 cfu/g
Optical Rotation	[α] _D ²⁰ = 6.7 °
Transmission	State of solution : 100%
Loss on Drying	0.04%
Coliform Organisms	Negative/g
Microbial Count	< 1000 cfu/g (Total Count)
Insoluble material	Insoluble foreign matter : Passes test
Other Amino Acids	< 0.5%
Residue On Ignition	0.01%
Assay	99.7% (Dried basis)
Grade	USP
Storage	Store at RT
Additional Information	Identification : Conforms to USP standard

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Remarks

See material safety data sheet for additional information

For laboratory use only

The foregoing is a copy of the Certificate of Analysis as provided by our supplier



Bala Kumar
Quality Control Manager