



INDOFINE Chemical Company, Inc.

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Certificate of Analysis

Catalogue Number	04-1529
Lot Number	0592587
Product	L-Glutamine
	L-Gln-OH
CAS Number	56-85-9
Molecular Formula	$C_5H_{10}N_2O_3$
Molecular Weight	146.15

Appearance	White crystalline powder
Heavy Metals	≤ 10 ppm
Arsenic (As_2O_2)	≤ 1 ppm
Anion	Chloride: $\leq 0.05\%$ Sulfate: $\leq 0.05\%$
Cation	Iron: ≤ 10 ppm
pH	4.75-6.0
Optical Rotation	$[a]_D^{20} = + 6 \pm 2^\circ$
Loss on Drying	$\leq 0.1\%$
Other Amino Acids	$\leq 0.5\%$
Residue On Ignition	$\leq 0.1\%$
Assay (anhydrous basis)	$\geq 99\%$
Storage	Store at RT
Additional Information	Identity: To Pass Test State of solution: $\geq 98\%$