



The Power to Question

CERTIFICATE OF ANALYSIS

Catalog Number: sc-295285
Lot Number: SAMPLE
Product Name: L-Glutamine alpha-tert-butyl ester hydrochloride
CAS Number: 39741-62-3
Molecular Formula: $C_9H_{18}N_2O_3 \cdot HCl$
Molecular Weight: 238.71

Test	Specification	Result
Appearance	White to off-white powder	Complies
Identification (NMR)	Conforms to structure	Complies
Identification (Infrared Spectrum)	Conforms to structure	Complies
Identification (Mass Spectrometry)	Conforms to structure	Complies
Purity (HPLC)	$\geq 98\%$	98.10%
Clarity of Solution	0.3g in 2ml H ₂ O clear solution	Complies
Melting Point		141.6-201.7° C
Specific Rotation ($\alpha_{20/D}$)		+17.54° (C=2 in H ₂ O)
Loss on Drying	$\leq 1.0\%$	0.96%
Water Content (KF)	$\leq 1.0\%$	0.58%

Satisfaction Guarantee: We appreciate your business and are committed to providing the highest level of quality and service. Any product that does not meet the performance standards indicated in our product literature will be replaced at no charge. Our policy is valid for one year from the date of your purchase.

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