

Chem-Impex International, Inc.

Tel: (630) 766-2112

E-mail: sales@chemimpex.com

Shipping and Correspondence:

935 Dillon Drive

Wood Dale, IL 60191

Fax: (630) 766-2218

Web site: www.chemimpex.com

Manufacturing site:

825 Dillon Drive

Wood Dale, IL 60191

Certificate of Analysis

Catalogue Number	03064
Lot Number	000424-130124-10915
Product	L-Glutamic acid di-<i>tert</i>-butyl ester hydrochloride L-Glu(OtBu)-OtBu•HCl
CAS Number	32677-01-3
Molecular Formula	C ₁₃ H ₂₅ NO ₄ •HCl
Molecular Weight	295.8

Appearance	White to off-white powder
Solubility	Clear Solution (0.3 g in 2 mL Methanol)
Melting Point	117-118.3 °C
Water Content (Karl Fisher)	0.20%
Optical Rotation	[α] _D ²⁰ = +22.0° (C=1 in MeOH)
Infrared Spectrum	Conforms to structure
Analysis by Mass Spectra	Conforms to standard
Loss on Drying	0.19% (50 °C for 2 hours)
¹H NMR	Conforms to structure
Purity by HPLC	98.63%
Storage	Store at 0-8 °C
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