Chem-Impex International, Inc.

Tel: (630) 766-2112 Fax: (630) 766-2218

E-mail: sales@chemimpex.com Web site: www.chemimpex.com

Shipping and Correspondence:935 Dillon Drive
825 Dillon Drive

Wood Dale, IL 60191 Wood Dale, IL 60191

Certificate of Analysis

Catalogue Number 02213

Lot Number 000424-160815-13410

Product N^{ϵ} -Z-L-lysine *tert*-butyl ester hydrochloride

 $L\text{-}Lys(Z)\text{-}OtBu\bullet HCl$

CAS Number 5978-22-3

Molecular Formula C₁₈H₂₈N₂O₄·HCl

Molecular Weight 372.89

Appearance White powder

Solubility Clear solution (0.1g in 2ml water)

0.40%

Melting Point 145.4 - 145.9 °C

Water Content (Karl

Fisher)

Optical Rotation [a]_D²⁰ = +12.2° (C=2 in EtOH)

Infrared Spectrum Conforms to structure
Analysis by Mass Spectra Conforms to standard

Loss on Drying 0.14% (60°C,2h)

¹**H NMR** Conforms to structure

Purity by HPLC 99.50%

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