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: Manufacturing site:

935 Dillon Drive 825 Dillon Drive

Wood Dale, IL 60191 Wood Dale, IL 60191

Certificate of Analysis

Catalogue Number 11678

Product L-Glutamic acid γ-methyl ester α-tert-butyl

ester hydrochloride

Lot Number 000424-161105-10956

 $L\text{-}Glu(OMe)\text{-}OtBu\bullet HCl$

CAS Number 34582-33-7

Molecular Formula C₁₀H₁₉NO₄•HCl

Molecular Weight 253.77

Appearance White powder

Solubility Clear solution (0.3 g in 2 mL H2O)

0.043%

Melting Point 130.3-130.7 °C

Water Content (Karl

Fisher)

Optical Rotation $[a]_{D}^{20} = +17.9^{\circ} (C=2 \text{ in H2O})$

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

Loss on Drying 0.37% (60 °C, 2 h)

1H NMR Conforms to structure

Purity by HPLC 99.16%

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