## **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	02411
Lot Number	000424-150515-36301
Product	$N^{lpha}$ -Fmoc- $N^{\delta}$ -trityl-L-glutamine
	Fmoc-L-Gln(Trt)-OH
CAS Number	132327-80-1
Molecular Formula	$C_{39}H_{34}N_2O_5$
Molecular Weight	610.7
Appearance	White powder
Solubility	Clear solution (0.3 g in 2 ml DMF)
Melting Point	120.3-159.3 °C
Water Content (Karl	0.93%
Fisher)	
Kaiser Test	< 5%
<b>Optical Rotation</b>	$[a]_D^{20} = -14.8^{\circ} (C=1, DMF)$
Infrared Spectrum	Conforms to structure
Analysis by Mass Spectra	Conforms to standard
Loss on Drying	0.52% (50°C, 2 hours)
<sup>1</sup> H NMR	Conforms to structure
<b>D-Enantiomer</b>	Not detectable
Purity by HPLC	98.53%
<b>Purity by TLC</b>	> 98%
Storage	Store at 0-8 °C

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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

litumer.

Bala Kumar Quality Control Manager