Chem-Impex International, Inc.

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

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

Manufacturing site:

Shipping and Correspondence:

935 Dillon Drive 825 Dillon Drive

Wood Dale, IL 60191 Wood Dale, IL 60191

Certificate of Analysis

Catalogue Number 04432

Product Nd-Trityl-D-glutamine hydrate

Lot Number 000424-150108-16806

 $D\text{-}Gln(Trt)\text{-}OH\cdot H_2O$

CAS Number 200625-76-9 Molecular Formula C₂₄H₂₄N₂O₃·H₂O

Molecular Weight 406.5

Appearance White powder

Solubility Clear solution (0.3 gram in 4ml AcOH)

1.609%

Melting Point 216.6-218.8 °C

Water Content (Karl

Fisher)

Optical Rotation [a]_D²⁰ = +14.4° (C=1, in AcOH)

Infrared SpectrumConforms to structureAnalysis by Mass SpectraConforms to standardLoss on Drying0.75% (105°C,2h)

¹⁹F NMR Conforms to structure

Purity by HPLC 99.20%

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