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 06175

Lot Number 002058-20150902

Product S-Trityl-L-penicillanine

L-Pen(Trt)-OH

H- β , β -Dimethyl-L-Cys(Trt)-OH

CAS Number 135681-66-2 Molecular Formula C₂₄H₂₅NO₂S

Molecular Weight 391.5

Appearance White to off-white powder

Optical Rotation $[a]_D^{20} = +196 \pm 2^{\circ} (C=1 \text{ in MeOH})$

13C NMR Conforms to structure
1H NMR Conforms to structure

Purity by HPLC 98.77%

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