Chem-Impex International, Inc.

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825 Dillon Drive

Wood Dale, IL 60191

Certificate of Analysis

02249 **Catalogue Number**

000424-180417-11702 **Lot Number**

Z-L-serine Product

Z-L-Ser-OH

1145-80-8 **CAS Number** $C_{11}H_{13}NO_5$ **Molecular Formula**

239.2 **Molecular Weight**

Appearance White powder

Clear solution (0.3 g in 2 mL DMF) **Solubility**

117.4 - 118.2 ℃ **Melting Point**

Elemental Analysis

(Found)

< 5.0% (C, H, N)

Water Content (Karl

Fisher)

0.060%

 $[a]_D^{20} = +5.8$ ° (C=7 in AcOH) **Optical Rotation**

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

0.22% (50°C, 2h) **Loss on Drying**

¹H NMR Conforms to structure

Chiral HPLC 99.91% (ee) **D-Enantiomer** 0.0841% **Purity by HPLC** 99.43%

Store at 0-8 °C Storage

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Catalog Number: 02249 Lot Number: 000424-180417-11702

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