## Chem-Impex International, Inc.

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935 Dillon Drive 825 Dillon Drive Wood Dale, IL 60191 Wood Dale, IL 60191

## Certificate of Analysis

02188 **Catalogue Number** 

120327-12107 **Lot Number** 

**Product**  $N^{\alpha}$ - $N^{\text{im}}$ -Bis-Z-L-histidine

Z-L-His(Z)-OH

 $C_{22}H_{21}N_3O_6$ **Molecular Formula** 

423.4 Molecular Weight

White powder Appearance

**Solubility** Clear solution (0.3 gram in 2 ml DMF)

93.6-94.8 °C **Melting Point** 

Water Content (Karl

Fisher)

0.66%

**Optical Rotation** Conforms to structure **Infrared Spectrum** 

Conforms to structure **Analysis by Mass Spectra** <sup>1</sup>H NMR Conforms to structure

**Purity by HPLC** 98.58%

Store at 0-8°C **Storage** 

**Remarks** See material safety data sheet for additional information

 $[a]_D^{20} = +10.5^{\circ} (C=1 \text{ in } H_2O)$ 

For laboratory use only

The foregoing is a copy of the Certificate of Analysis as provided by our supplier

**Bala Kumar** 

**Quality Control Manager**