Chem-Impex International, Inc.

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Shipping and Correspondence:

Manufacturing site: 935 Dillon Drive 825 Dillon Drive Wood Dale, IL 60191 Wood Dale, IL 60191

Certificate of Analysis

00464 **Catalogue Number**

L-Asparagine anhydrous **Product**

001192-210612 Lot Number

L-Asn-OH

CAS Number 70-47-3 $C_4H_8N_2O_3$ **Molecular Formula Molecular Weight** 132.12

White crystals or crystalline powder **Appearance**

< 5 ppm (as Pb) **Heavy Metals**

Chloride (Cl) : < 0.02% Anion

Sulfate (SO_4) : < 0.02%

Ammonium (NH₄): < 0.1%Cation

Iron (Fe): < 10 ppm

Arsenic $(As_2O_3) : < 1 \text{ ppm}$

4.6 pН

 $[a]_{D}^{20} = 35.1^{\circ}$ **Optical Rotation**

Transmission State of solution: 99.2%

Loss on Drying 0.1% **Other Amino Acids** 0.15%

Residue On Ignition 0.02% (Sulfated)

99.7% **Assay**

Store at RT **Storage**

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