Chem-Impex International, Inc.

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Shipping and Correspondence: Manufacturing site:

Wood Dale, IL 60191 Wood Dale, IL 60191

Certificate of Analysis

Catalogue Number 00026

935 Dillon Drive

Lot Number 001192-110912

Product L-Asparagine monohydrate

L-Asn-OH•H₂O

(S)-2-Aminosuccinic acid 4-amide monohydrate

825 Dillon Drive

CAS Number 5794-13-8

Molecular Formula C₄H₈N₂O₃•H₂O

Molecular Weight 150.1

Appearance White crystalline powder

Heavy Metals < 10 ppm Arsenic (As₂O₂) < 1 ppm

Anion Chloride (Cl⁻): < 0.020%

Sulfate (SO_4^{2-}) : < 0.020%

Cation Ammonium (NH_4^+) : < 0.10%

Iron (Fe): < 10 ppm

pH 5.00

Optical Rotation $[a]_D^{20} = +35.15^{\circ}$ Infrared SpectrumConforms to structureTransmissionState of solution: 99%

Loss on Drying 11.80%

Other Amino Acids Chromatographically not detectable

Residue On Ignition 0.03%

Assay by titration 99.65% (anhydrous basis)

Storage Store at RT

Certificate of Analysis

Catalog Number: 00026 Lot Number: 001192-110912

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