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

Catalogue Number 00161

Lot Number 001192-180103

Product L-Glutamic acid

L-Glu-OH

(S)-1-Aminopropane-1,3-dicarboxylic acid

CAS Number 56-86-0 Molecular Formula C₅H₉NO₄

Molecular Weight 147.14

Appearance White crystals or crystalline powder

Heavy Metals < 10 ppm

Anion Sulfates (SO4): < 300 ppm

Chlorides (Cl): < 100 ppm

Cation Iron (Fe): < 10 ppm

Ammonium (NH₄): < 200 ppm

Optical Rotation $[a]_D^{20} = +31.8^{\circ}$

Loss on Drying 0.10%

Sulfated Ash 0.04%

Assay 99.6%

Storage Store at RT

Additional Information State of solution: Clear and colorless

Ninhydring positive substances: Not more intense than the spot with

reference solution (0.5%)

Certificate of Analysis

Catalog Number: 00161 Lot Number: 001192-180103

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