Chem-Impex International, Inc.

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Wood Dale, IL 60191 Wood Dale, IL 60191

Certificate of Analysis

Catalogue Number 03403

935 Dillon Drive

Lot Number 000424-160908-21401

Product 4-Nitro-D-phenylalanine monohydrate

 $D\text{-Phe}(4\text{-NO}_2)\text{-OH}\bullet H_2O$

CAS Number 56613-61-7 Molecular Formula C₉H₁₀N₂O₄·H₂O

Molecular Weight 228.2

Appearance Faintly yellow powder

Solubility Clear solution (0.3 g in 1mL 6N HCL and 2 mL DMF)

Melting Point 216.7-218.5°C

Optical Rotation [a]_D²⁰ = -7.0° (C=1 in 5N HCL)

Infrared Spectrum Conforms to structure

Analysis by Mass Spectra Conforms to standard

Loss on Drying 0.27% (70°C,2h)

¹**H NMR** Conforms to structure

L-Enantiomer Not detectable

Purity by HPLC 99.58%

Chiral Purity 100% (ee)

Storage Store at 0-8 °C

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