

# Chem-Impex International, Inc.

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Tel: (630) 766-2112

E-mail: sales@chemimpex.com

Shipping and Correspondence:

935 Dillon Drive

Wood Dale, IL 60191

Fax: (630) 766-2218

Web site: www.chemimpex.com

Manufacturing site:

825 Dillon Drive

Wood Dale, IL 60191

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## Certificate of Analysis

|                          |   |
|--------------------------|---|
| <b>Catalogue Number</b>  | 05901   |
| <b>Lot Number</b>        | 000129-12074  |
| <b>Product</b>           | <b>L-Aspartic acid <math>\alpha</math>-4-nitroanilide hydrochloride</b> |
|                          | L-Asp-pNA•HCl   |
| <b>CAS Number</b>        | 154564-03-1   |
| <b>Molecular Formula</b> | C <sub>10</sub> H <sub>11</sub> N <sub>3</sub> O <sub>5</sub> •HCl      |
| <b>Molecular Weight</b>  | 289.72  |

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|---------------------------|--|
| <b>Appearance</b>         | Light yellow crystalline powder  |
| <b>Melting Point</b>      | 178-179 °C   |
| <b>Optical Rotation</b>   | [ $\alpha$ ] <sub>D</sub> <sup>20</sup> = +33.3° (C=1 in MeOH)                       |
| <b>Assay by titration</b> | 98.8%  |
| <b>Purity by HPLC</b>     | 99.3%  |
| <b>Purity by TLC</b>      | > 99%  |
| <b>Storage</b>            | Store at 0-8 °C  |
| <b>Remarks</b>            | See material safety data sheet for additional information<br>For laboratory use only |

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



**Bala Kumar**  
Quality Control Manager