

# 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>	03371
<b>Lot Number</b>	000127-1044295
<b>Product</b>	<b>L-Histidine amide dihydrochloride</b>
<b>CAS Number</b>	71666-95-0
<b>Molecular Formula</b>	C <sub>6</sub> H <sub>10</sub> N <sub>4</sub> O•2HCl
<b>Molecular Weight</b>	227.2

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<b>Appearance</b>	White powder
<b>Appearance of Solution</b>	Clear, colorless solution (50 mg/ml in water)
<b>TLC System</b>	n-butanol/Acetic Acid/H <sub>2</sub> O (4:2:2) Isopropanol/Ammonia Conc. (1:1) Methanol/Chloroform/Ammonia 17% (2:2:1) Plate: Silica gel 60 F <sub>254</sub> Detected by: UV, ninhydrin, chlorine-tolidine
<b>Optical Rotation</b>	[α] <sub>D</sub> <sup>24</sup> = +23.4° (C=1 in H <sub>2</sub> O)
<b>Titration</b>	Chloride content: 31.3% (AgNO <sub>3</sub> )
<b><sup>13</sup>C NMR</b>	Conforms to structure
<b><sup>1</sup>H NMR</b>	Conforms to structure
<b>Assay</b>	67.7% (Elemental Analysis, Nth 36.34%, Nfd 24.60%)
<b>Purity by TLC</b>	> 99%
<b>Storage</b>	Store at RT
<b>Remarks</b>	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