

# *Chem-Impex International, Inc.*

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825 Dillon Drive

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## *Certificate of Analysis*

<b>Catalogue Number</b>	06042
<b>Lot Number</b>	000424-150514-16061
<b>Product</b>	<b>L-Glutamic acid diethyl ester hydrochloride</b>

L-Glu(OEt)-OEt•HCl

<b>CAS Number</b>	1118-89-4
<b>Molecular Formula</b>	C <sub>9</sub> H <sub>17</sub> NO <sub>4</sub> •HCl

<b>Molecular Weight</b>	239.7
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<b>Appearance</b>	White crystalline powder
<b>Solubility</b>	Clear solution (0.3 g in 2 mL DMF)
<b>Melting Point</b>	102-109 °C
<b>Water Content (Karl Fisher)</b>	0.198%
<b>Optical Rotation</b>	$[\alpha]_D^{20} = +25.5^\circ$ (C=2, EtOH)
<b>Infrared Spectrum</b>	Conforms to standard
<b>Analysis by Mass Spectra</b>	Conforms to standard
<b><sup>1</sup>H NMR</b>	Conforms to standard
<b>Purity by HPLC</b>	99.81%
<b>Storage</b>	Store at 0-8°C
<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**