

# *Chem-Impex International, Inc.*

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**Manufacturing site:**

825 Dillon Drive

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## *Certificate of Analysis*

<b>Catalogue Number</b>	05957
<b>Lot Number</b>	111225-10936
<b>Product</b>	<b>D-Glutamic acid <math>\gamma</math>-methyl ester</b>

D-Glu(OMe)-OH

D-Glutamic acid 5-methyl ester

<b>CAS Number</b>	6461-04-7
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<b>Molecular Formula</b>	C <sub>6</sub> H <sub>11</sub> NO <sub>4</sub>
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<b>Molecular Weight</b>	161.6
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<b>Appearance</b>	White powder
<b>Solubility</b>	Clear solution (0.3 g in 2 mL 6N HCl)
<b>Melting Point</b>	161.0-161.3 °C
<b>Water Content (Karl Fisher)</b>	0.28%
<b>Optical Rotation</b>	$[\alpha]_D^{20} = -30.7^\circ$ (C=2 in 6N HCl)
<b>Infrared Spectrum</b>	Conforms to structure
<b>Analysis by Mass Spectra</b>	Conforms to standard
<b>Loss on Drying</b>	0.03% (70 °C, 2h)
<b><sup>1</sup>H NMR</b>	Conforms to structure
<b>Purity by HPLC</b>	99.79%
<b>Storage</b>	Store at 0-8 °C

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**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**

A handwritten signature in black ink, appearing to read 'Bala Kumar', with a stylized flourish at the end.

**Bala Kumar**  
**Quality Control Manager**