

# Chem-Impex International, Inc.

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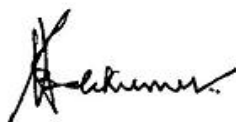
## Certificate of Analysis

<b>Catalogue Number</b>	11677
<b>Lot Number</b>	000129-13066
<b>Product</b>	<b>L-Glutamic acid <math>\gamma</math>-benzyl ester <math>\alpha</math>-<i>tert</i>-butyl ester hydrochloride</b> L-Glu(OBzl)-OtBu•HCl
<b>CAS Number</b>	105590-97-4
<b>Molecular Formula</b>	C <sub>16</sub> H <sub>23</sub> NO <sub>4</sub> •HCl
<b>Molecular Weight</b>	329.82

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<b>Appearance</b>	White crystalline powder
<b>Melting Point</b>	108-110 °C
<b>Optical Rotation</b>	[ $\alpha$ ] <sub>D</sub> <sup>20</sup> = +15.2° (C=1 in EtOH)
<b>Assay by titration</b>	98.2%
<b>D-Enantiomer</b>	0.03%
<b>Purity by HPLC</b>	99.3%
<b>Purity by TLC</b>	> 98%
<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