

# Chem-Impex International, Inc.

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## Certificate of Analysis

<b>Catalogue Number</b>	03139
<b>Lot Number</b>	000424-211009-10953
<b>Product</b>	<b>O-tert-Butyl-L-serine t-butyl ester</b> L-Ser(tBu)-OtBu•HCl
<b>CAS Number</b>	51537-21-4
<b>Molecular Formula</b>	C <sub>11</sub> H <sub>23</sub> NO <sub>3</sub> ·HCl
<b>Molecular Weight</b>	253.8

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<b>Appearance</b>	White powder
<b>Solubility</b>	Clear solution (0.3 g in 2 mL Water)
<b>Melting Point</b>	125.2 - 125.9 °C
<b>Water Content (Karl Fisher)</b>	0.38%
<b>Optical Rotation</b>	[α] <sub>D</sub> <sup>20</sup> = -8.4 ° (C=1 in H <sub>2</sub> O)
<b>Infrared Spectrum</b>	Conforms to structure
<b>Analysis by Mass Spectra</b>	Conforms to standard
<b>Loss on Drying</b>	0.19% (60 °C, 2h)
<b><sup>1</sup>H NMR</b>	Conforms to structure
<b>Purity by HPLC</b>	99.34%
<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