

# Chem-Impex International, Inc.

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825 Dillon Drive

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## Certificate of Analysis

<b>Catalogue Number</b>	04446
<b>Lot Number</b>	000424-171121-10842
<b>Product</b>	<b>D-Proline <i>tert</i>-butyl ester hydrochloride</b>

D-Pro-OtBu•HCl

<b>CAS Number</b>	184719-80-0
<b>Molecular Formula</b>	C <sub>9</sub> H <sub>17</sub> NO <sub>2</sub> ·HCl

<b>Molecular Weight</b>	207.7
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<b>Appearance</b>	White powder
<b>Solubility</b>	Clear solution (0.3 g in 2 ml H <sub>2</sub> O)
<b>Melting Point</b>	107.3 - 111.7 °C
<b>Water Content (Karl Fisher)</b>	0.40%
<b>Optical Rotation</b>	[α] <sub>D</sub> <sup>20</sup> = +31.5° (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>	0.14% (60 °C, 2h)
<b><sup>1</sup>H NMR</b>	Conforms to structure
<b>Purity by HPLC</b>	99.62%
<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**



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