

# Chem-Impex International, Inc.

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## Certificate of Analysis

<b>Catalogue Number</b>	06440
<b>Lot Number</b>	000424-170628-12504
<b>Product</b>	<b><i>N</i><sup>α</sup>-Z-<i>N</i><sup>δ</sup>-Boc-D-ornithine</b>
	Z-D-Orn(Boc)-OH
<b>CAS Number</b>	98264-52-9
<b>Molecular Formula</b>	C <sub>18</sub> H <sub>26</sub> N <sub>2</sub> O <sub>6</sub>
<b>Molecular Weight</b>	366.4

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<b>Appearance</b>	White powder
<b>Solubility</b>	Clear solution (0.3 g in 2mL DMF)
<b>Melting Point</b>	100.8-102.3 °C
<b>Water Content (Karl Fisher)</b>	0.12%
<b>Optical Rotation</b>	[α] <sub>D</sub> <sup>20</sup> = + 3.1 ° (C=1 in DMF)
<b>Infrared Spectrum</b>	Conforms to structure
<b>Analysis by Mass Spectra</b>	Conforms to standard
<b>Loss on Drying</b>	0.06% (40°C,2h)
<b><sup>1</sup>H NMR</b>	Conforms to structure
<b>L-Enantiomer</b>	0.0232%
<b>Purity by HPLC</b>	99.06%
<b>Chiral Purity</b>	99.98% (ee)
<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**