

# Chem-Impex International, Inc.

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## Certificate of Analysis

<b>Catalogue Number</b>	04453
<b>Lot Number</b>	000424-131227-13069
<b>Product</b>	<b>N<sup>in</sup>-Boc-L-tryptophan</b> L-Trp(Boc)-OH
<b>CAS Number</b>	146645-63-8
<b>Molecular Formula</b>	C <sub>16</sub> H <sub>20</sub> N <sub>2</sub> O <sub>4</sub>
<b>Molecular Weight</b>	304.4

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<b>Appearance</b>	White powder
<b>Solubility</b>	Clear solution (0.1g in 2 mL 1N NaOH)
<b>Melting Point</b>	250.7 - 252.7 °C
<b>Water Content (Karl Fisher)</b>	0.711%
<b>Optical Rotation</b>	[α] <sub>D</sub> <sup>20</sup> = 3 ° (C=2 in 1N NaOH)
<b>Infrared Spectrum</b>	Conforms to structure
<b>Analysis by Mass Spectra</b>	Conforms to standard
<b>Loss on Drying</b>	1.11%
<b><sup>1</sup>H NMR</b>	Conforms to structure
<b>Purity by HPLC</b>	99.97%
<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