

Chem-Impex International, Inc.

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Certificate of Analysis

| | |
|------------------------------------|--|
| Catalogue Number | 03817 |
| Product | <i>N</i> ^α -Boc- <i>N</i> ⁱⁿ -Boc-L-trvptophan |
| Lot Number | 000424-220124-31705 Boc-L-Trp(Boc)-OH |
| CAS Number | 144599-95-1 |
| Molecular Formula | C ₂₁ H ₂₈ N ₂ O ₆ |
| Molecular Weight | 404.46 |
| <hr/> | |
| Appearance | White powder |
| Solubility | Clear solution (0.3 g in 2ml DMF) |
| Melting Point | 156.4 - 157.5 °C |
| Water Content (Karl Fisher) | 0.08% |
| Optical Rotation | [α] _D ²⁰ = -11.5 ° (C=3 in DMF) |
| Infrared Spectrum | Conforms to structure |
| Analysis by Mass Spectra | Conforms to standard |
| Loss on Drying | 0.6% (70 °C, 2h) |
| ¹H NMR | Conforms to structure |
| Purity by HPLC | 99.56% |
| Storage | Store at 0 - 8 °C |
| 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