## Chem-Impex International, Inc.

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## Certificate of Analysis

Catalogue Number 00035

 Product
 Boc-Arg(Tos)-OH

 Lot Number
 000424-160929-30201

Boc-N®-4-toluenesulfonyl-L-arginine

CAS Number 13836-37-8 Molecular Formula C<sub>18</sub>H<sub>28</sub>N<sub>4</sub>O<sub>6</sub>S

Molecular Weight 428.5

**Appearance** White powder

**Solubility** Clear solution (0.3 g in 2 mL DMF)

**Melting Point** 100.9 - 105.0 °C

**Optical Rotation** [a]<sub>D</sub><sup>20</sup> = -3.9 ° (C=4 in DMF)

Infrared Spectrum Conforms to structure
Analysis by Mass Spectra Conforms to standard

Loss on Drying 1.27% (40 °C, 2h)

1H NMR Conforms to structure

**D-Enantiomer** 0.2044%

 **Purity by HPLC** 98.30%

 **Purity by TLC** > 98%

 **Chiral Purity** 99.79% (ee)

 **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**