## **Chem-Impex International, Inc.**

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## Certificate of Analysis

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Catalogue Number	05474
Lot Number	000424-201008-30232
Product	$N^{lpha}$ -Boc- $N^{\omega,\omega'}$ -bis-Z-D-arginine
	Boc-D-Arg(Z) <sub>2</sub> -OH
CAS Number	145881-13-6
Molecular Formula	$C_{27}H_{34}N_4O_8$
Molecular Weight	542.6
Appearance	White powder
Solubility	Clear solution (0.1 g in 2 mL DMF)
Melting Point	135.7 - 136.6 °C
Water Content (Karl	0.08%
Fisher)	
<b>Optical Rotation</b>	$[a]^{20}D = 4.9 \circ (C=1 \text{ in DMF})$
Infrared Spectrum	Conforms to structure
Analysis by Mass Spectra	Conforms to standard
Loss on Drying	0.10% (50 °C, 2h)
<sup>1</sup> H NMR	Conforms to structure
Purity by HPLC	98%
Storage	Store at $\leq -4 ^{\circ}C$

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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

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Bala Kumar Quality Control Manager