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

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## Certificate of Analysis

Catalogue Number	05836
Lot Number	000424-210420-11845
Product	L-Alanine 4-nitroanilide hydrochloride
	L-Ala-pNA•HCl
CAS Number	31796-55-1
Molecular Formula	$C_9H_{11}N_3O_3 \cdot HCl$
Molecular Weight	245.7
Appearance	Light yellowish powder
Solubility	Clear solution (0.3 g in 2 mL DMF)
Melting Point	177.1 - 225.7 °C
Water Content (Karl Fisher)	2.98%
<b>Optical Rotation</b>	$[a]_D{}^{20} = 16.6 \circ (C=1 \text{ in DMF})$
Infrared Spectrum	Conforms to structure
Analysis by Mass Spectra	Conforms to standard
Loss on Drying	1.56% (90 °C, 2h)
<sup>1</sup> H NMR	Conforms to structure
Purity by HPLC	99.81%
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

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Bala Kumar Quality Control Manager