## Chem-Impex International, Inc.

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## Certificate of Analysis

Catalogue Number	03119
Lot Number	000424-150107-10913
Product	D-Phenylalanine <i>tert</i> -butyl ester hydrochloride
	D-Phe-OtBu•HCl
CAS Number	3403-25-6
Molecular Formula	$C_{13}H_{19}NO_2 \cdot HCl$
Molecular Weight	257.8
	White menulon
Appearance	White powder
Solubility	Clear solution (0.1 g in 2 mL MeOH)
Melting Point	222.1-222.7 °C
Water Content (Karl Fisher)	0.120%
<b>Optical Rotation</b>	[a] <sub>D</sub> <sup>20</sup> = -47.3° (C=1 in EtOH)
Infrared Spectrum	Conforms to structure
Analysis by Mass Spectra	Conforms to standard
Loss on Drying	0.84% (90 °C,2h)
<sup>1</sup> H NMR	Conforms to structure
Purity by HPLC	99.70%
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