

# Chem-Impex International, Inc.

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**Tel:** (630) 766-2112

**E-mail:** sales@chemimpex.com

**Shipping and Correspondence:**

935 Dillon Drive

Wood Dale, IL 60191

**Fax:** (630) 766-2218

**Web site:** www.chemimpex.com

**Manufacturing site:**

825 Dillon Drive

Wood Dale, IL 60191

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## Certificate of Analysis

<b>Catalogue Number</b>	02237
<b>Lot Number</b>	000424-150528-11901
<b>Product</b>	<b>Z-L-proline</b>
	Z-L-Pro-OH
	(S)-Z-pyrrolidine-2-carboxylic acid
<b>CAS Number</b>	1148-11-4
<b>Molecular Formula</b>	C <sub>13</sub> H <sub>15</sub> NO <sub>4</sub>
<b>Molecular Weight</b>	249.27

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<b>Appearance</b>	White powder
<b>Solubility</b>	Clear solution ( 0.3 g in 2 mL of AcOH)
<b>Melting Point</b>	75.1-76.0 °C
<b>Water Content (Karl Fisher)</b>	0.130%
<b>Optical Rotation</b>	[α] <sub>D</sub> <sup>20</sup> = -63.4° (C=2 in AcOH)
<b>Infrared Spectrum</b>	Conforms to structure
<b>Analysis by Mass Spectra</b>	Conforms to standard
<b>Loss on Drying</b>	0.23% (30 °C, 2h)
<b><sup>1</sup>H NMR</b>	Conforms to structure
<b>Purity by HPLC</b>	99.45%
<b>Storage</b>	Store at 0-8 °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**



**Bala Kumar**  
**Quality Control Manager**