

# Chem-Impex International, Inc.

---

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

---

## Certificate of Analysis

<b>Catalogue Number</b>	33590
<b>Lot Number</b>	000424-210410-21199
<b>Product</b>	<b>Fmoc-2,4-difluoro-D-phenylalanine</b> Fmoc-D-Phe(2,4-DiF)-OH
<b>CAS Number</b>	1217820-78-4
<b>Molecular Formula</b>	C <sub>24</sub> H <sub>19</sub> F <sub>2</sub> NO <sub>4</sub>
<b>Molecular Weight</b>	423.41

---

<b>Appearance</b>	White powder
<b>Solubility</b>	Clear solution (0.3 g in 2 mL DMF)
<b>Melting Point</b>	154.9 - 155.7 °C
<b>Water Content (Karl Fisher)</b>	0.17%
<b>Optical Rotation</b>	[α] <sup>20</sup> <sub>D</sub> = 43.6 ° (C = 1 in DMF)
<b>Infrared Spectrum</b>	Conforms to structure
<b>Analysis by Mass Spectra</b>	Conforms to standard
<b>Loss on Drying</b>	0.50% (70 °C, 2h)
<b><sup>1</sup>H NMR</b>	Conforms to structure
<b>Purity by HPLC</b>	99.54%
<b>Storage</b>	Store at 2 - 8 °C
<b>Remarks</b>	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