

# Chem-Impex International, Inc.

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## Certificate of Analysis

<b>Catalogue Number</b>	05675
<b>Lot Number</b>	000127-0507457
<b>Product</b>	<b>N<sup>α</sup>-Fmoc-L-asparagine 4-nitrophenyl ester</b> Fmoc-L-Asn-ONp
<b>CAS Number</b>	71989-17-8
<b>Molecular Formula</b>	C <sub>25</sub> H <sub>21</sub> N <sub>3</sub> O <sub>7</sub>
<b>Molecular Weight</b>	475.46

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<b>Appearance</b>	White powder
<b>Solubility</b>	Clear, colorless solution (10mg/mL in DMF)
<b>Melting Point</b>	186 °C
<b>Elemental Analysis (Found)</b>	C=63.35%, H=4.52%, N=8.77%
<b>TLC System</b>	Benzene/dioxane/acetic acid (95/25/4) Chloroform/ethylacetate/acetic acid (50/50/2) Chloroform/methanol/acetic acid/water (85/13/0.5/1.5) Plate : Silicagel 60 F <sub>254</sub> Detected by : Chlorine-tolidine
<b>Optical Rotation</b>	[α] <sub>D</sub> <sup>24</sup> = -37.8 ° (C=1 in DMF)
<b>Chiral HPLC</b>	99.6% (ee)
<b>D-Enantiomer</b>	0.4%
<b>Purity by TLC</b>	Product decomposes on TLC plate
<b>Storage</b>	Store at 0-8°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