

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

Catalogue Number	16539
Lot Number	000672-01224-102-02
Product	Boc-4,4-Difluoro-L-proline methyl ester

CAS Number	203866-17-5
------------	-------------

Molecular Formula	C ₁₁ H ₁₇ F ₂ NO ₄
-------------------	--

Molecular Weight	265.25
------------------	--------

Appearance	White solid
------------	-------------

Solubility	Clear solution (1g in 10 mL of Ethyl acetate and Dichloromethane)
------------	---

Melting Point	41-42 °C
---------------	----------

Optical Rotation	[α] _D ²³ = -50.6° (C=1.01% in MeOH)
------------------	---

¹³ C NMR	Conforms to structure
---------------------	-----------------------

¹⁹ F NMR	Conforms to structure
---------------------	-----------------------

¹ H NMR	Conforms to structure
--------------------	-----------------------

Purity	> 99% (NMR)
--------	-------------

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



Bala Kumar
Quality Control Manager