

# **CERTIFICATE OF ANALYSIS**

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#### 1. Identification

Structure:

Catalogue Number: C176280 CAS Number: 78663-07-7

N-Carbobenzyloxy-D-aspartic Acid

Synonym: N-[(Phenylmethoxy)carbonyl]-D-aspartic Acid;

Benzyloxycarbonyl-D-aspartic Acid; D-N-

(Benzyloxycarbonyl)aspartic Acid; NSC 88490;

Molecular Formula:

C12H13NO6

Molecular weight:

267.23

Source of Product:

N/A

Solubility:

Methanol (Sparingly)

Lot Number: 2-ABY-108-1

HO<sub>2</sub>C

ADI-100-1

**Shipping** This Product Is Stable To Be **Condition:** Shipped At Room Temperature

Purity: 98%

Storage Condition: 4°C

#### 2. Warning

Warning 1: Warning 2: Warning 3:

## 3. Analytical Information

**Additional Information:** 

Tests:Specifications:Results:AppearanceReport ResultsWhite SolidMelting PointReport Results109 - 110°CH NMRConforms to StructureConforms

Elemental Analysis Conforms %C: 52.94, %H: 4.91, %N: 5.34

MS Conforms to Structure Conforms

Specific Rotation Report Results  $+7.2^{\circ}$  (c = 1.1, Methanol)

TLC Conditions: SiO2; Dichloromethane: Methanol: Acetic Acid = 9: 1:0.03; Visualized with UV, AMCS, KMnO4, and Ninhydrin; Single Spot, Rf = 0.45.1H NMR and MS conform to structure. Elemental Analysis: (Found) %C: 52.94, %H: 4.91, %N: 5.34; (Calculated) %C:

53.93, %H: 4.90, %N: 5.24Specific Rotation: +7.2° (c = 1.1,

Methanol)

Purity is based on the analytical results of the tests performed. NMR and Elemental Analysis (if available) may have an accuracy of  $\pm$  2%. Isotopic purity is based on mass distribution observed. The contents of the specifications are subject to change without advance notice, and the specification values displayed here are the most up to date values.

### 4. Signatures

| Reviewed By | Reviewed By | C of A Approved<br>By | Test Date | Retest Date |
|-------------|-------------|-----------------------|-----------|-------------|
| Eric Beaton |             |                       | 8/29/2018 | 8/27/2028   |

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