

## **CERTIFICATE OF ANALYSIS**

## 1. Identification

Catalogue Number
A790038

Lot Number

3-AZP-60-1

Product Name

L-Asparagine-13C4, 15N2 Hydrate

**Synonyms** 

Structure 5 4 1

**CAS Number** 

<u>Solubility</u>

202406-87-9

Aqueous Acid (Slightly), Water

(Slightly)

Molecular Formula

Source of Product

 $^{13}C_4H_8^{15}N_2O_3$  • N/A

Molecular Weight Purity
138.08 + 18.02 >95%

**Shipping Condition** 

This Product Is Stable To Be Shipped At Room

Temperature

**Long Term Storage Conditions** 

4°C

2. Warnings

Not Determined

3. Analytical Information

<u>Tests</u>	Specifications	Results
Appearance	White to Off-White Solid	White to Off-White Solid
NMR	Conforms to Structure	Conforms
C NMR	Conforms to Structure	Conforms
HPLC Purity	>95%	96.01% (ELSD)
MS	Conforms to Structure	Conforms
Isotopic Purity	>95%	99.1%
Water Content	Report Result	12.0% by Karl Fischer

## **Additional Information**

Normalized Intensity:  $d_0 = 0.08\%$ ,  $d_1 = 0.05\%$ ,  $d_2 = 0.00\%$ ,  $d_3 = 0.00\%$ ,  $d_4 = 0.17\%$ ,  $d_5 = 4.46\%$ ,  $d_6 = 95.25\%$ 

Toni Rantanen

Manager, Quality Assurance

Purity is based on the analytical results of the tests performed. NMR and Elemental Analysis (if available) may have an accuracy of ± 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

Sarbjeet Kaur

**Product Quality Specialist** 

Reviewed by Reviewed by C of A Approved by Test Date Retest Date

| Facility | Facility

Chanell Chu

Jr. Quality Assurance

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