

CERTIFICATE OF ANALYSIS

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1. Identification

Catalogue A627550 CAS 76326-31-3 Number: Number:

> Synonym: 5-Phosphononorvaline; (±)-2-Amino-5-

phosphonopentanoic Acid; (±)-2-Amino-5phosphonovaleric Acid; 2-APV; 2-Amino-5phosphonopentanoic Acid; 2-Amino-5phosphonovaleric Acid; 5-Phosphono-DLnorvaline; AP 5; AP 5 (amino acid); APV; DL-

2-Amino-5-phosphonovaleric Acid; DL-AP5

DL-2-Amino-5-phosphonopentanoic Product:

Acid

Structure: Molecular Formula: NH_2

> C5H12NO5P Molecular weight:

197.13

Source of Product:

Synthetic Solubility:

Aqueous Acid (Slightly), Methanol (Very Slightly),

Water (Slightly)

Purity: 9-WAI-130-3 98% Number:

This Product Is Stable To Be Storage Shipping Condition: -20°C Condition: Shipped At Room Temperature

2. Warning

Lot

Warning 1: Warning 2: Warning 3:

3. Analytical Information

Tests: Specifications: Results: **Appearance** White to Off-White Solid White Solid Conforms **NMR** Conforms to Structure

Elemental Analysis Conforms %C: 30.10, %H: 6.18, %N: 6.63

HPLC Purity Report Result 99.52% (ELSD)

MS Conforms to Structure Conforms Conforms to Structure P NMR Conforms

Additional Information: N/A

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

C of A Approved **Reviewed By Test Date Retest Date Reviewed By** Nicole Yip Toni Rantanen Chanell Chu 7/20/2023 7/18/2027