

CERTIFICATE OF ANALYSIS

1. Identification

Catalogue Number B419092

Lot Number 16-CNN-12-3

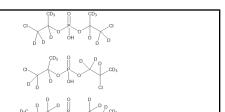
Product Name

Bis-(1-Chloro-2-propyl)phosphate-d12 (Mixture of Isomers)

Synonyms

1-Chloro-2-propanol Hydrogen Phosphate-d12; BCPP-d12

Structure



CAS Number

Solubility

N/A

DMSO (Slightly), Methanol (Slightly)

Shipping Condition

This Product Is Stable To Be Shipped At Room

Long Term Storage Conditions

Temperature

Molecular Formula

Source of Product

C₆HD₁₂Cl₂O₄P Synthetic

Molecular Weight Purity 263.12 >95% 4°C, Hygroscopic

2. Warnings

Hygroscopic

3. Analytical Information

<u>Tests</u>	<u>Specifications</u>	Results
Appearance	Colourless to Brown Oil	Clear Colourless to Pale Yellow Oil
NMR	Conforms to Structure	Conforms
P NMR	Conforms to Structure	Conforms
Elemental Analysis	Conforms	%C: 27.17, %H: 5.05
HPLC Purity	>95%	98.14% (ELSD)
MS	Conforms to Structure	Conforms
Isotopic Purity	>95%	99.7%

Additional Information

Normalized Intensity: $d_0 = 0.00\%$, $d_1 = 0.00\%$, $d_2 = 0.00\%$, $d_3 = 0.00\%$, $d_4 = 0.04\%$, $d_5 = 0.00\%$, $d_6 = 0.00\%$, $d_7 = 0.00\%$, $d_8 = 0.00\%$, $d_9 = 0.00\%$ 0.00%, $d_{10} = 0.05\%$, $d_{11} = 2.78\%$, $d_{12} = 97.13\%$

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

Reviewed by Reviewed by C of A Approved by **Test Date Retest Date** Play 4/28/2023 4/26/2027

Henry Tieu Toni Rantanen Chanell Chu **Product Quality Specialist** Manager, Quality Assurance Jr. Quality Assurance