



CERTIFICATE OF ANALYSIS

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1. Identification

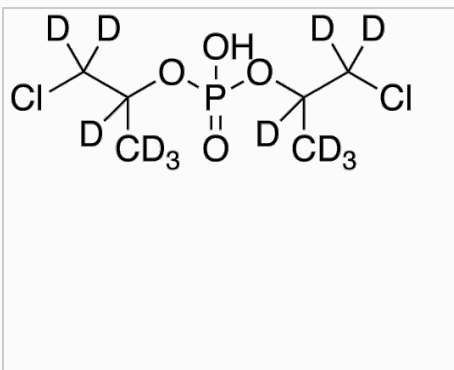
Catalogue Number: B419092

CAS Number: NA

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

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

Structure:



Molecular Formula:

$C_6H_{12}Cl_2O_4P$

Molecular weight:

263.12

Source of Product:

Synthetic

Solubility:

DMSO (Slightly), Methanol (Slightly)

Lot Number: 2-IAD-69-1

Purity: 90%

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

Storage Condition: 4°C

2. Warning

Warning 1:

Warning 2:

Warning 3:

3. Analytical Information

Tests:	Specifications:	Results:
Appearance	Colourless to Brown Oil	Hazy Brown Thick Oil
NMR	Conforms to Structure	Conforms
Elemental Analysis	Conforms	%C: 27.74, %H: 5.16
HPLC Purity	Report Result	98.09% (ELSD)
MS	Conforms to Structure	Conforms
Isotopic Purity	>95%	99.5%
P NMR	Conforms to Structure	Conforms

Additional Information:

Normalized Intensity: d0 = 0.00%, d1 = 0.00%, d2 = 0.00%, d3 = 0.00%, d4 = 0.02%, d5 = 0.00%, d6 = 0.00%, d7 = 0.00%, d8 = 0.00%, d9 = 0.00%, d10 = 0.00%, d11 = 5.62%, d12 = 94.38%

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 By	Test Date	Retest Date
Swathi Reddy	Toni Rantanen	Chanell Chu	4/25/2023	4/23/2027