

# Certificate of Analysis

## C AMIDITE 4.62g

Product No. **4339779**  
Lot No. **RE0142**  
Date of Manufacture **04 Jan 2016**

TEST	SPECIFICATION	RESULT
<b>Appearance</b>		
Color	Color intensity must not exceed Pantone #P1-4U or #P4-2U	Pass
Solution Clarity	0.2 M solution in acetonitrile is free from undissolved particulate	Pass
Average Coupling Efficiency	≥ 98.0%	98.5%
Sum of Acetonitrile, Ethyl Acetate, and Dichloromethane	≤ 3.0%	0.6%
<b>Purity</b>		
By HPLC	≥ 99%	99%
By <sup>31</sup> P NMR	≥ 99%	99%
Identity by HPLC	Matches Reference	Pass
Water	≤ 0.3% w/w	0.0%
<b>HPLC Impurity Profile</b>		
Range		
Single Impurity	None > 0.5%	None
Presence of dA, dG, or T amidite	≤ 0.10%	0.00%
Sum of dA, dG, or T amidite	≤ 0.3%	0.0%
<b>NMR Impurity Profile</b>		
Range		
Sum of 140-152ppm	≤ 0.3%	0.2%
Sum of 5-35ppm	≤ 1.0%	0.7%
>170ppm	None detected	Pass

***For Research Use Only. Not for use in diagnostic procedures.***



**Quality Assurance**  
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