

Thermo Scientific TheraPure® DNA Phosphoramidites



Controlled critical impurities and water content for stringent applications of oligonucleotide synthesis.

Thermo Scientific TheraPure® phosphoramidites are designed for oligonucleotide manufacturers requiring highly defined impurity profiles and strictly controlled processes.

- **Low Critical Impurities**

Sum of non-primary peaks at 140-152 ppm $\leq$ 0.3 mol % in ^{31}P NMR

No Base Impurity by HPLC $>$ 0.10%

- **Documented Process Control**

Manufactured in ISO9001 registered facility

Thoroughly documented processes provide consistent product quality with minimal batch to batch variability

- **Supply Chain Control**

Utilize Thermo Fisher Scientific global supplier management program

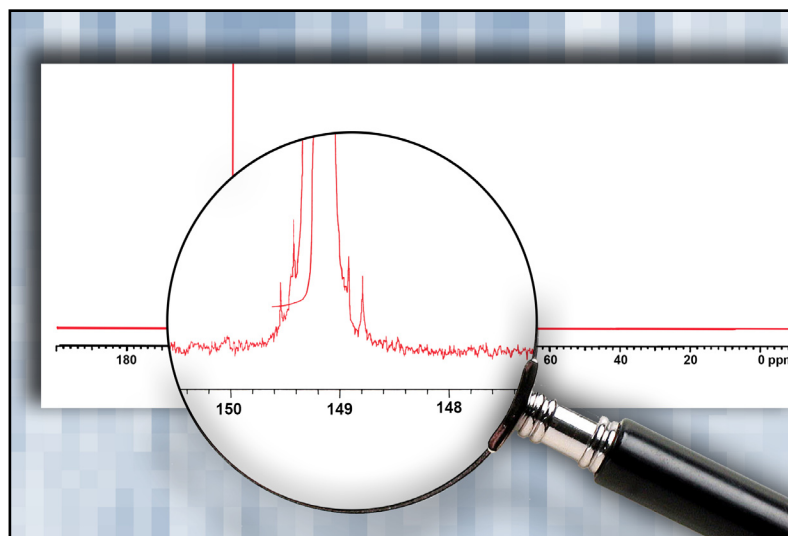
Produced with materials of no known animal source

- **Control of Residual Water**

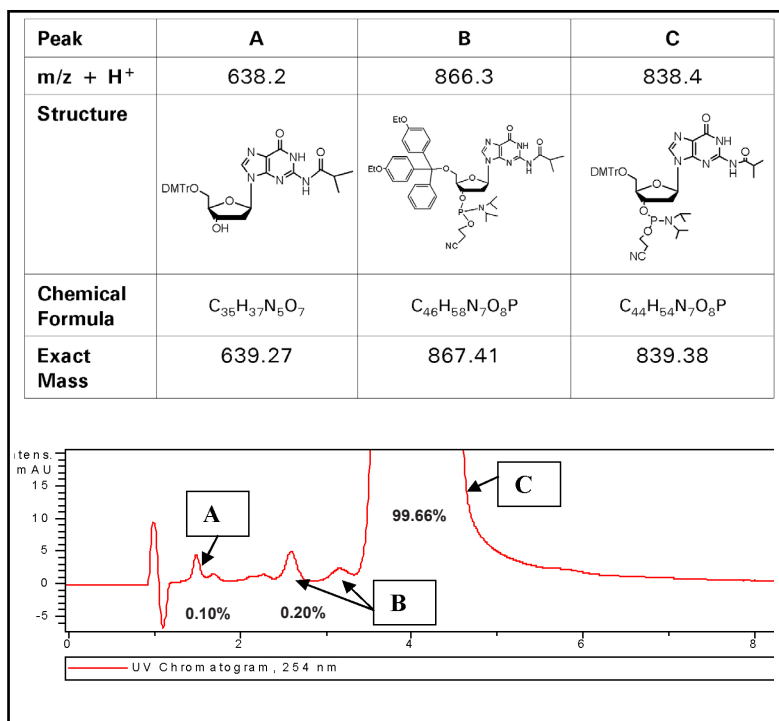
Water content of $\leq$ 0.3% contributes to higher coupling efficiency and solution stability

- **Kilogram to Ton Quantities**

Highly scalable amidite manufacturing facilities enable us to meet the requirements of companies manufacturing oligonucleotides on a very large scale



Typical NMR profile for TheraPure DNA phosphoramidites.
Scale expansion reveals no contaminants in critical impurity range.



Impurity profile of TheraPure dG phosphoramidite by LC-MS

Product Specifications

P(III) NMR Impurity Profile	Sum of non-primary peaks at 140-152 ppm is ≤ 0.3 mol % Sum of non-primary peaks at 5-35 ppm is ≤ 1.0 mol % No peak(s) above 170 ppm
Purity by both HPLC and ^{31}P NMR	$\geq 99\%$
HPLC Sum of Critical Impurities	$\leq 0.3\%$
HPLC Single Base Impurity	$\leq 0.10\%$
Water content	$\leq 0.3\%$
Identification by UV Spectrum	From 200-350 nm, the maxima and minima of the sample and standard spectra are within $\pm 2\text{nm}$
Solution Clarity	0.2 M solution in acetonitrile is free from undissolved particulate
Color intensity of powder	Must not exceed Pantone #S1-8 or #S5-8

Ordering Information

Product Name	Product #
TheraPure dA Phosphoramidite	27-2030
TheraPure dC Phosphoramidite	27-2032
TheraPure dG Phosphoramidite	27-2034
TheraPure T Phosphoramidite	27-2036

Related Products

Thermo Scientific DNA Phosphoramidites
 Thermo Scientific TheraPure® RNA Phosphoramidites
 Thermo Scientific RNA Phosphoramidites
 Thermo Scientific DyLight™ Phosphoramidites
 Thermo Scientific RNA CPG Synthesis Supports

For more information visit the web site at
www.thermo.com/milwaukee

Thermo Fisher Scientific (Milwaukee) LLC

We develop integrative partnerships with customers across the globe to provide premium molecular biology reagents and innovative services. These products are used in a variety of applications to advance the development of biotechnology research, diagnostic and therapeutic applications.

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