

SAFC

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# **User Instructions**

## TETTM

## **Product Description**

5'-Tetrachloro-Fluorescein Phosphoramidite Chemical Formula: C<sub>46</sub>H<sub>54</sub>Cl<sub>4</sub>N<sub>3</sub>O<sub>10</sub>P Molecular Weight: 981.72

Storage: 20°C

Storage: -20°C

### **Product List**

100µmol	
M045080-0.1mmol	TET™ 0.1mmol, Expedite™ and Polygen®
M045030-0.1mmol	TET™ 0.1mmol, ABI™ and ÄKTA®

#### Method

- 1. Use anhydrous acetonitrile (water content < 30ppm) to dissolve the TET phosphoramidite. It is important to maintain anhydrous conditions when dissolving the TET phosphoramidite in acetonitrile.
- For use on Expedite<sup>™</sup> and PolyGen<sup>®</sup> Synthesizers, add 2.0ml acetonitrile to 0.1mmol TET phosphoramidite (M045080-0.1mmol) to obtain a concentration of 50mg/ml. For use on ABI™ and ÄKTA<sup>®</sup> Synthesizers, add 1.0ml acetonitrile to 0.1mmol TET phosphoramidite (M045030-0.1mmol) to obtain a concentration of 100mg/ml.
- 3. Gently swirl the vial until the powder is completely dissolved.
- 4. Once the TET phosphoramidite has been dissolved and placed on your instrument, it should be used within 48 hours. If you do not plan to use all of the material in 48 hours, remove the vial, seal carefully and store at -20°C until needed.
- 5. Attach the dissolved phosphoramidite to the appropriate position on the synthesizer. Ensure that the delivery line to the synthesis chamber is sufficiently primed.
- 6. Enter the sequence of the oligonucleotide you wish to synthesize with TET phosphoramidite at the 5'-end. For TET phosphoramidite a coupling time of 3 minutes is recommended.
- 7. Proceed as you would with a standard DNA oligonucleotide synthesis. Note that the TET phosphoramidite does not contain a DMT group. Oligonucleotides do not need to be detritylated at the end of the synthesis. Note that TET phosphoramidite will terminate the synthesis and can only be employed in the last coupling step on the 5' terminus.
- 8. Cleave and deprotect the oligonucleotide following standard protocols with ammonia. Note that TET oligonucleotides should not be subjected to prolonged heating of more than 16 hours at 55°C.
- 9. The oligonucleotide is now ready for further processing, such as desalting or purification with RP-HPLC, AX-HPLC or gel-based methods.

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