

# H-Phosphonates

## H-Phosphonate Monomers

Glen Research H-Phosphonates are analyzed by HPLC and are synthesis-tested. H-Phosphonates are especially useful for the preparation of modified internucleotide linkages which are unattainable by phosphoramidite chemistry. The most popular application is the preparation of radiolabeled phosphorothioates, since the sulfurization reaction is carried out off the synthesizer.

**dA-H-Phosphonate: Cat. No.: 10-1200-xx**

**dC-H-Phosphonate: Cat. No.: 10-1210-xx**

**dG-H-Phosphonate: Cat. No.: 10-1220-xx**

**dT-H-Phosphonate: Cat. No.: 10-1230-xx**

## H-Phosphonate Reagents

Our H-Phosphonate solvents and reagents have been discontinued. H-Phosphonate reagents are easily prepared using high purity products and the formulations shown below.

1-Adamantanecarbonyl chloride is available from Aldrich, Catalog No. 117722. Dilute to 0.1M.  
 (Activator for monomers and capping reagent)

Acetonitrile/Pyridine (50:50), anhydrous  
 (Monomer Diluent)

Acetonitrile/Pyridine (95:5), anhydrous  
 (Activator Diluent)

1% Isopropyl Phosphite in Acetonitrile/Pyridine (50:50)  
 (Capping Reagent)

Acetonitrile/Pyridine (50:50)  
 (Neutralizer and Wash Solvent)

4% I2 in Pyridine/H2O/THF (10:10:80)  
 THF/H2O/TEA (80:10:10)  
 (Both reagents are required for oxidation of H-phosphonate linkages)