

α -d-Glucofuranose and α -d-allofuranose diacetonides and silyl ether of α -d-glucofuranose diacetonide in dithiophosphorylation reactions

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Abstract

© 2016 Wiley Periodicals, Inc. α -d-Glucofuranose and α -d-allofuranose diacetonides react with 2,4-diorganyl 1,3,2,4-dithiadiphosphetane-2,4-disulfides to form optically active dithiophosphonates in 78–81% yields, which are transformed into the corresponding ammonium salts in 90–97% yields by the treatment of n-hexadecylamine. The S-silyldithiophosphonate was prepared in 93% yield by the reaction of 2,4-bis(butoxyphenyl) 1,3,2,4-dithiadiphosphetane-2,4-disulfide with silyl ether of α -d-glucofuranose diacetonide. One of the salts obtained possesses antibacterial activity against *Staphylococcus aureus* ATCC 6538-P.

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