

Disilyl dithiophosphonates in the synthesis of open chain and cyclic organothiophosphorus compounds

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Abstract

O-(Trimethylsiloxy)alkyl S-trimethylsilyl aryldithiophosphonates 7a-d were obtained by the reaction of 2,4-diaryl-1,3,2,4-dithiadiphosphetane-2,4- disulfides 5a,b with disilyl derivatives of glycols 6a,c and salicyl alcohol 6b. The reactions of mixed O,S-bis(trimethylsilyl) 2,4-di(3,5--i-tert-butyl-4- hydroxyphenyl)dithiophosphonate 1 and S-silyl aryldithiophosphonates 7a,b with S,S-diethyldithiodiphenylgermane 2, dichlorodiphenylgermane 8a, and dichlorodiphenylstannane 8b were studied. The structure of hexaphenyl-2,4,6,1,3, 5-trithiatriggerminane 11 was established by X-ray single crystal diffraction. © 2004 Wiley Periodicals, Inc.

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