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Reaction of 2-R-benzo[d]-1,3,2-oxazophosphorin-8-one with hexafluoroacetone. Synthesis and steric structure of 3-phenyl-9,9-bis(trifluoromethyl)-2-ethoxybenzo[d]-1,3,2-oxazaphosphepine-2,8-dione

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Abstract

Reaction of hexafluoroacetone with 2-R-benzo[d]-1,3,2-oxazophosphorin-8-ones leads to the formation of seven-membered nitrogen-containing heterocycles, the derivatives of 3-phenyl-9,9-bis(trifluoromethyl)benzo[d]-1,3,2-oxazaphosphepine-2,8-diones. Steric structure of 2,3-diphenyl-9,9-bis(trifluoromethyl)-benzo[d]-1,3,2-oxazaphosphepine-2,8-dione was established by X-ray structural analysis. By hydrolysis of the phosphepines a functionally substituted fluorinated ketone, 2-hydroxy-1-(2'-phenylamino)phenyl-2-trifluoromethyl-3,3-trifluoropropan-1-one, was obtained. © 2008 MAIK Nauka.

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