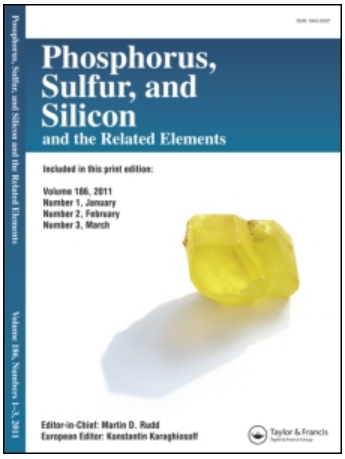

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Six Membered Heterocycles in the Reaction of Sulfenyl Chlorides with Dialkyl 2-Chloro-2(1-cyclohexenyl)-ethenylphosphonates

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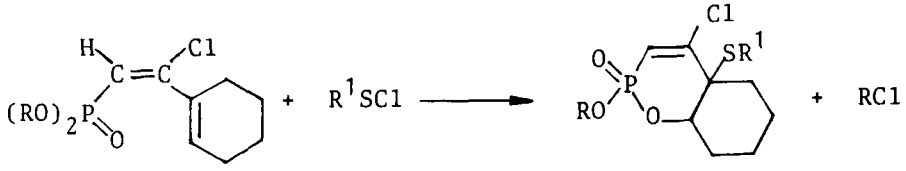
In the reaction of dialkyl 2-chloro-2(1-cyclohexenyl)ethenylphosphonates with methyl- and arylsulfenyl chlorides, a heterocyclization of the 1,3-dienylphosphonate system of double bonds (O=P-C=C-C=C) occurs leading to the formation of six-membered heterocycles - hexahidrobenz-2H-1,2-oxaphosphorines:



R = Me, Et, Pr^n, Pr^i and Bu

R^1 = Me, Ph, p-MePh

The structure of the compounds has been established by ^1H-, ^{31}P- and ^{13}C-NMR and IR-spectra.