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The Interaction of Diazo Compounds with Phosphorylated Systems with S-H, S-S, S-Hal Bonds

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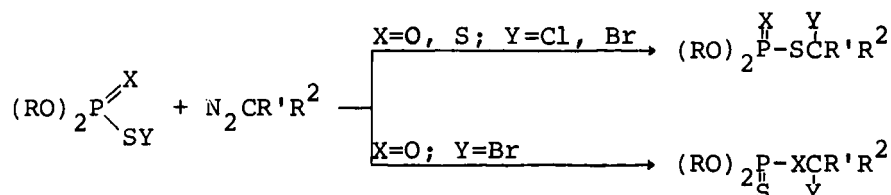
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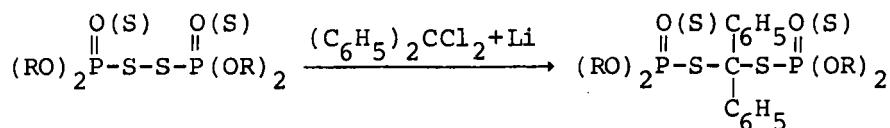
THE INTERACTION OF DIAZO COMPOUNDS WITH PHOSPHORYLATED SYSTEMS WITH S-H, S-S, S-Hal BONDS

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The interactions of phosphorylsulphenylhalides, phosphorylated disulphides, thio- and dithiophosphoric acids with diazo compounds were investigated. It has been shown that these reactions mainly lead to the insertion of methylene groups into S-Hal, S-S, S-H bonds. α -Chloromethyl-phosphorothio- and -dithioates are obtained from the corresponding phosphoryl- and thiophosphorylsulphenyl-chlorides. As for phosphorylsulphenylbromides, the reaction is accompanied by phosphoryl-thiophosphoryl rearrangements:



Phosphorylated disulphides react with phenyl diazomethane forming the corresponding bis-phosphoryl-phenylmethanes. Bis-phosphoryl-diphenylmethanes are obtained only by the reaction of disulphides with diphenyl carbene formed from diphenyl dichloromethane by metallic lithium:



The insertion into S-H bond in the reaction of thio- and dithiophosphoric acids with bis-diazo ketones was studied:

