

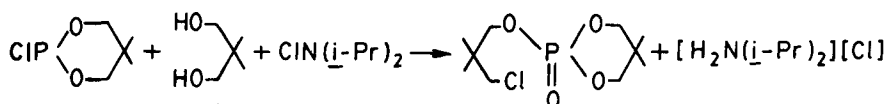
Ring opening reactions of cyclic chlorophosphites and synthesis of (amino)chlorophosphonium salts via silylamines

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The following novel results in phosphorus chemistry against a background of related reactions in the literature will be highlighted.

i) Oxidative addition reactions of cyclic (chloro)phosphites with quinones or diols + chloro-di(isopropyl)amine lead to ring-opened products.



ii) Action of sodium on **1** or its arsenic analogue affords compounds of the type $(\text{OCH}_2\text{CMe}_2\text{CH}_2\text{O})\text{-M-OCH}_2\text{CMe}_2\text{CH}_2\text{O-M-(OCH}_2\text{CMe}_2\text{CH}_2\text{O)}$ [M = P, As].

iii) Phenyltetrachlorophosphorane reacts with (*t*-butylamino)trimethylsilane or *t*-butylamine to yield predominantly $\text{PhPCl}_3(\text{NH-}t\text{-Bu})$ or $\text{PhPCl}_2(\text{NH-}t\text{-Bu})_2$ respectively. These compounds may exist in their phosphonium salt formulation.

Results obtained by utilizing different ring types (in systems (i) and (ii)) are discussed.

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