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Phosphorylation of Oligophenols by Phosphorous Amides

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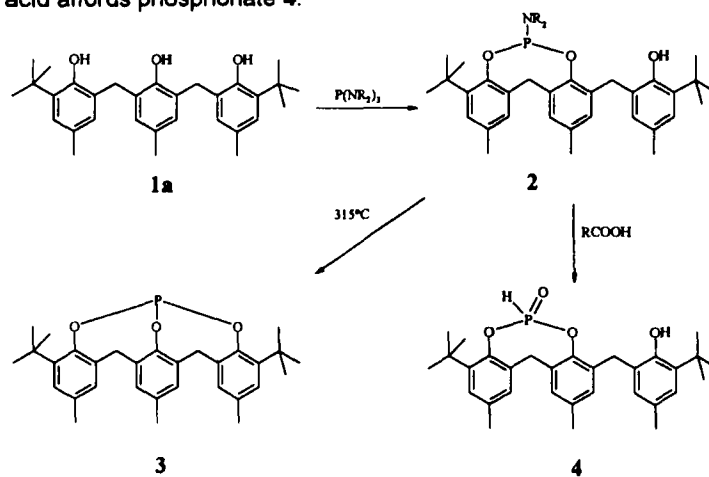
Phosphorylation of Oligophenols by Phosphorous Amides

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Searching for new stabilizers and flame retardants we are interested in trivalent phosphorus compounds with higher molecular weight ^[1,2]. Various oligophenols were treated with phosphorous amides under different conditions.

Different products were observed depending on the oligophenolic structure. For example, triphenol **1a** reacts with phosphorous triamides under formation of dioxaphosphocine **2** in high yields. Thermolysis of **2** leads to bicyclic phosphite **3** quantitatively. In this case, the reaction of **2** with glacial acetic acid affords phosphonate **4**.



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