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Metal Coordinated Phosphinite Derivatives

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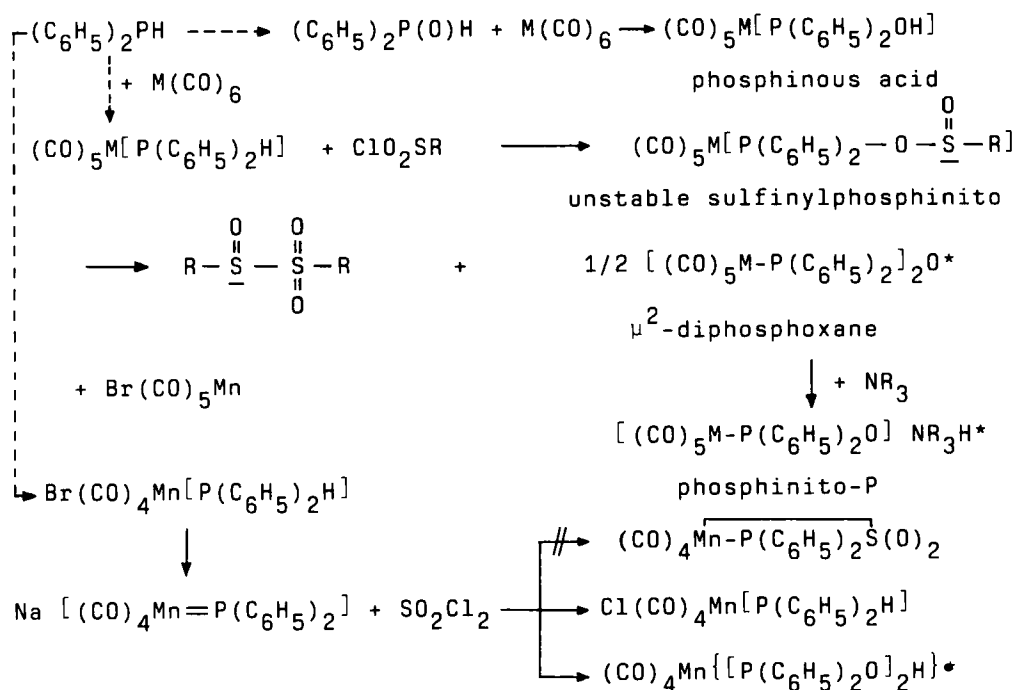
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Metal Coordinated Phosphinite Derivatives

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The following phosphinites as derivatives of the unknown diphenylphosphinous acid with phosphorus(III) of the type $(C_6H_5)_2POX$ ($X = H, NH_4, S(O)R, P(C_6H_5)_2$) are normally unstable in the free state. However, they can be stabilized in the protecting coordination sphere of transition metal complexes by building them up by direct or indirect methods. The simple starting molecule is, in principle, diphenylphosphane, $(C_6H_5)_2PH$, which can be functionalized by oxidation or coordination and subsequent substitution and reduction reactions as it is shown in the following scheme:



* x-ray structure analysis

hydrogenbisphosphinito-P,P'