

Lithium Bis(triisopropylsilyl)phosphanide and its Pentacarbonyltungsten Adduct: Synthesis and Crystal Structures of the Dimer $[(\text{thf})\text{Li}-\text{P}(\text{Si}i\text{Pr}_3)_2]_2$ and the Solvent-Separated Ion Pair $[(\text{thf})_4\text{Li}]^+ [(\text{OC})_5\text{W}-\text{P}(\text{Si}i\text{Pr}_3)_2]^-$

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The lithiation of bis(triisopropylsilyl)phosphane with *n*-butyllithium in THF gave quantitatively dimeric $(\text{thf})\text{LiP}(\text{Si}i\text{Pr}_3)_2$ (**1**) with three-coordinate lithium atoms. The molecular structure of **1** shows Li-P bond lengths of 253.3(6) pm. In order to obtain the pentacarbonyltungsten complex of the sterically demanding phosphanide, $(\text{thf})\text{W}(\text{CO})_5$ was reacted with $(\text{thf})\text{LiP}(\text{Si}i\text{Pr}_3)_2$ in THF. The resulting solvent-separated complex $[(\text{thf})_4\text{Li}]^+ [(\text{OC})_5\text{WP}(\text{Si}i\text{Pr}_3)_2]^-$ (**2**) was structurally characterized and shows a very large W-P distance of 266.65(7) pm.

Key words: Phosphanes, Bis(triisopropylsilyl)phosphanides, Solvent-Separated Complex, Lithium Phosphanides, Pentacarbonyltungsten Complexes