Phosphine-Substituted Diborane(4)yl Complexes of Tungsten

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The reaction of the 1,2-dihalodiborane(4) $B_2(NMe_2)_2Cl_2$ with the lithium tungsten salts Li[(η^5-C_5H_5)(R_3P)$(OC)_2W$] [R = Me (**3a**), Ph (**3b**)] yields *via* alkali salt elimination the phosphine-substituted diborane(4)yl tungsten complexes [(η^5-C_5H_5)(R_3P)$(OC)_2W$-{B(NMe_2)-B(NMe_2)Cl}] [R = Me (**4a**), Ph (**4b**)]. Both compounds have been fully characterized in solution by NMR and IR spectroscopy and **4a** additionally by X-ray diffraction analysis.

Key words: Half-Sandwich Tungsten Complexes, Boranes, Diboranes(4), Boryl Complexes