

Selective Hydroxylation of Adamantane and Its Derivatives

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Abstract—A general method was developed for hydroxylation into the nodal position of adamantane and its 1- and 2-substituted derivatives employing systems $\text{H}_2\text{O}-\text{CBr}_4$ (BrCCl_3 , CCl_4) in the presence of complexes of Pd, Ni, Ru, Co, Mo, W, and Fe. The oxidants in the systems are hypochlorous (HOCl) or hypobromous (HOBr) acids generated from water and halomethanes under the reaction conditions.

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