Titanyl Acetylacetonate as an Efficient Catalyst for a Mild and Convenient Reduction of Carbonyl Compounds with NaBH₄ under Aprotic Condition

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Z. Naturforsch. 58b, 1220–1226 (2003); received August 11, 2003

Titanyl acetylacetonate, $TiO(acac)_2$, is used as an efficient catalyst for the reduction of carbonyl compounds with sodium borohydride under aprotic condition. Reduction reactions are performed in CH₃CN and THF. The corresponding alcohols are obtained in high to excellent yields and the chemoselective reduction of aldehydes over ketones is achieved successfully.

Key words: Titanyl Acetylacetonate, Carbonyl Compounds, Borohydride Reduction