
Synthesis of Diarylmethanes via Pd-Catalyzed Coupling of Aryltosylates with Benzyltitanium Reagents

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Abstract—Two new bidentate phosphate ligands have been synthesized by Pd-catalyzed coupling reactions, characterized and evaluated. An efficient and simple Pd-catalyzed synthetic method for diarylmethane derivatives in good to high yields and two new diarylmethanes is reported for the first time. It provides a wide range of substrates and exhibits good functional group tolerance. This method has been used for the synthesis of Beclobrate drug and is expected to find various applications in pharmaceutical synthesis and related areas.

Keywords: diarylmethane, C–C bond, aryl tosylates, palladium-catalysis, benzyltitanium reagents

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