

ProPhenol-Catalyzed Asymmetric Additions by Spontaneously Assembled Dinuclear Main Group Metal Complexes

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Supporting Information

Reference 8. Trost, B. M.; Rohbogner, C. *Unpublished results*.

Recovery of the ProPhenol ligand **1a**. Briefly, a Zn-ProPhenol-catalyzed reaction was quenched with *sat. aq.* NaHSO₄ and the ProPhenol bis sodium salt isolated by filtration. The resulting solid was neutralized with 1 M NaOH, stirred with EtOAc for 12 hours and extracted twice with EtOAc. The combined organic layers were washed with brine, dried over MgSO₄, filtered and concentrated *in vacuo* to approximately 100 mL total volume. Hexanes (150–200 mL) was then added to cause precipitation and the resulting solid isolated by filtration. The ProPhenol ligand was isolated as a yellow solid (2.7 g, 95% recovery). Alternatively, the ProPhenol ligand can be purified by silica gel chromatography (gradient elution: 9:1 to 4:1 pet. ether: EtOAc).