Experimental (provided by SMM)

Nickelocene was provided by the instructor. The reaction of nickelocene with DMAD was conducted in accordance with Girolami et. al.[3] DMAD (0.7 g, 5.8 mmol) was added to nickelocene (1.0 g, 5.2 mmol) in 50 mL of thf and stirred for a week. The solvent was removed and the residue was dissolved in 5 mL of CHCl3. The orange band was eluted from neural alumina using 1:1 hexane and CHCl3. The orange product was recrystallized from 16 mL of hot hexane. Yield: 1.0075 g, 58.5%. Mp (trial 1): 82.4-86.7 ˚C. Mp (trial 2): 83.2-85.4 ˚C.

(Information that appears in a table is not included in the experimental section.)