1,4-Dihydro-1,4-diphosphinine fused with two tetrathiafulvalenes

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SUPPORTING INFORMATION

Experimental Section

Reactions were carried out under nitrogen, THF was distilled from Na/benzophenone. *o*- Me_2TTF was prepared according to a literature method.¹ NMR spectra were recorded on a Bruker Avance DRX 500 spectrometer operating at 202.39 MHz for ³¹P.

1: Butyllithium (4 mL of a solution 2M in hexane) was added dropwise to a solution of *o*-DMTTF (0.928 g, 4 mmol) and 1.2 mL diisopropylamine in 60 mL THF, at -78°C, under magnetic stirring. After a period of 3 h, PhPCl₂ (0.56 mL, 4 mmol) was added, then the temperature was allowed to rise slowly overnight up to room temperature. After filtration, evaporation of solvents and a rapid chromatographic purification on silica gel with toluene, **1** was recovered as a red solid (*cis/trans* ratio 15:1). Yield 0.35 g (26%). Recrystallization from THF or toluene afforded *cis*-1. ³¹P NMR (THF): δ = -21.5 (s, *cis*-1), -25.6 (s, *trans*-1); elemental analysis (%): calcd for C₂₈H₂₂P₂S₈ *cis*-1: C 49.68, H 3.28; found: C 49.74, H 3.41.

⁽¹⁾ Gerson, F.; Lamprecht, A.; Fourmigué, M. J. Chem. Soc., Perkin Trans. 2 1996, 1409– 1414.