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Complexes of N-thiophosphorylthiourea αnaphthylnhc(S)NHP(S)(OiPr)2 (HL) with copper(I). crystal structures of HL and Cu(PPh3)2L

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Abstract

Reaction of the potassium salt of N-thiophosphorylated thiourea α -naphthylNHC(S)NHP(S)(OiPr)2 (HL) with Cu(PPh3)3I in aqueous EtOH/CH2Cl2 leads to the mononuclear complex [Cu(PPh3)2L-S,S']. By using copper(I) iodide instead of Cu(PPli3)3I, the polynuclear complex [Cun(L-S,S')n was obtained. The structures of these compounds were investigated by elemental analysis, H and 31P{1H} NMR and IR spectroscopy. The crystal structures of HL and Cu(PPh3)2-L were determined by singlecrystal X-ray diffraction. © 2009 Wiley-VCH Verlag GmbH & Co. KGaA.

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Keywords

Chelates, Copper, Crystal structure, N-thiophosphorylthiourea, Triphenylphosphane