Copper(i) complexes with N-(diisopropoxythiophosphoryl)thiobenzamide PhC(S)NHP(S)(OiPr)2

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Abstract

Reaction of the potassium salt of N-thiophosphorylthiobenzamide PhC(S)NHP(S)(OiPr)2 (HL) with CuI in aqueous EtOH leads to the tetranuclear [Cu4L4] and the polynuclear [KCuL 2]n complexes, while the same reactions using the lithium or sodium salts of HL exclusively lead to the tetramer [Cu4L 4]. Reaction of KL with the mixture of CuI and 2,2′-bipyridine (bpy) or 1,10-phenanthroline (phen) leads to the mononuclear complexes [Cu(bpy)L] and [Cu(phen)L]. The same complexes were obtained by the reaction of [Cu4L4] with bpy or phen. © 2010 The Royal Society of Chemistry.

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