Spectroscopic studies and crystal structure of a dimeric Zn(II) complex with diethyl (pyridin-2-ylmethyl)phosphate.

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Streszczenie

The crystal structure of $[Zn_2(2\text{-pmOpe})_2Cl_4]$ (2-pmOpe = diethyl (pyridin-2-ylmethyl)phosphate) was determined by X-ray-diffraction method. The compound was also characterized by IR, far-IR, 1H, and ^{31}P NMR spectroscopy. In this compound, 2-pmOpe is a bidentate N,O-bridging ligand and Zn(II) are slightly distorted tetrahedral $ZnNOCl_2$. Zn(II) ions are doubly bridged by the 2-pmOpe ligands, resulting in a dinuclear species. The structure is stabilized by intermolecular C–H ··· O and C–H ··· Cl hydrogen bonds. The spectral properties are in agreement with the structural data.

Słowa kluczowe

Zn(II), Phosphoric acid ester, N, O-donor ligand, crystal structure, Spectroscopic properties

Adres publiczny

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