CRYSTAL STRUCTURE OF A μ-OXO-BRIDGED DIMERIC IRON(III) COMPLEX

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A dimeric [{Fe(5-ClL1)}$_2$(μ-O)], [H_2-5-ClL1 = *N*,*N*′-bis(5-chloro-2-hydroxybenzylidene)-2-methylpropane-1,2-diamine] tetradentate Schiff-base complex, **1**, has been synthesized and its crystal structure has been determined by single crystal X-ray diffraction analysis. Structural analysis of complex **1** shows that the complex is a centrosymmetric dimer. Each of the Fe(III) ions has a five-coordinate geometry and one oxygen atom bridges two Fe(III) ions to form a μ-oxo structure. The geometry around iron atom can be described as a square based pyramid with the FeN_2O_2 coordination plane and oxo ligand.

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