



Crystal structure and molecular stereochemistry of the 1 : 2 adduct of anionic complex, dicyano-(5,10,15,20-tetramesityleneporphinato) iron(II) with bis(triphenylphosphine)nitrogen(1+), I₂, CDCl₃ solvate{[(CN)₂Fe^{II}(TMP)][PPN]₂ I₂ 2CDCl₃.

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Streszczenie

Treatment of (*meso*-tetramesityleneporphinato)iron(III) iodide [(TMP)FeI] with four-fold excess equivalents of bis(triphenylphosphine)nitrogen(1+) cyanide {[PPN][CN]} in chloroform solution resulted in the reduction of (TMP)Fe^{III} to (TMP)Fe^{II} and the formation of low-spin bis-cyanide {[(TMP)Fe(CN)₂][PPN]₂} complex cocrystallized with iodine and solvent molecules. The crystal and molecular structure of the complex was established crystallographically. There are two [(TMP)Fe(CN)₂]²⁻ anions in the unit cell (one half per asymmetric unit), four [PPN] cations, four CDCl₃ molecules and two disordered I₂ molecules (one half per asymmetric unit). The porphyrin macrocycle has crystallographically required symmetry and is planar with the Fe atom lying at 1/2,0,0.

Słowa kluczowe

crystals structures, Ion complexes, Low-spin complexes,
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