

Mixed-ligand copper(II) complexes with diethylenetriamine and histidine- or methioninehydroxamic acids in water solution.

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Streszczenie

Stability of the mixed-ligand complexes of Cu^{2+} ion with diethylenetriamine [bis(2-aminoethyl)amine, dien] as a primary ligand and histidinehydroxamic acid [2-amino-3-(4'-imidazolyl)propanehydroxamic acid, Hisha] or methioninehydroxamic acid [2-amino-4-(methylthio)butanehydroxamic acid, Metha] as a secondary ligand L and their absorption and EPR spectra at various pH values are reported. The visible spectra exhibit a characteristic red shift and a shoulder at lower energies indicating a five-coordinate structure of the formed complexes. The EPR spectral parameters support formation of mixed-ligand complexes which geometry is slightly deviated from square pyramidal. Stability of the mixed-ligand complexes with diethylenetriamine as a primary ligand and histidinehydroxamic acid or methioninehydroxamic acid as a secondary ligand, their absorption and EPR spectra indicating a five-co-ordinating structure of the formed complexes which is slightly deviated from square pyramidal.

Słowa kluczowe

Copper(II) complexes, Mixed-ligand complexes, Five-coordinate complexes, Aminohydroxamic acids, EPR spectra, VIS spectra

Adres publiczny

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