

Metal Tetrazole Complexes: Bis-(5-aminotetrazolato)-copper (II)

Brubaker, Carl H.

Two crystalline forms of bis-(5-aminotetrazolato)-copper (II) have been prepared and characterized. Visible and ultraviolet spectra of aqueous copper (II)-5-aminotetrazole solution have been examined. Continuous variation experiments reveal 1:2 interactions and a formation constant for the complex in solution has been determined and is about 10^{12} . Infrared studies suggest coordination involves the ring and not the 5-amino group. Acids decompose the complexes and bring about rupture of the tetrazole ring, while decomposition by ammonia does not affect the ring. © 1960, American Chemical Society. All rights reserved.