Removal Cobalt (II) and Copper (II) by Solvent Extraction from Sulfate Solutions by Capric Acid in Chloroform

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Abstract : Liquid-liquid extraction is one of the most useful techniques for selective removal and recovery of metal ions from aqueous solutions, applied in purification processes in numerous chemical and metallurgical industries. In this work, The liquid-liquid extraction of cobalt (II) and copper (II) from aqueous solution by capric acid (HL) in chloroform at 25°C has been studied. Our interest in this paper is to study the effect of concentration of capric acid on the extraction of Co(II) and Cu(II) to see the complexes could be formed in the organic phase using various concentration of capric acid. The extraction of cobalt (II) and copper (II) is extracted as the complex CoL2 (HL)2, CuL2 (HL)2.

Keywords: capric acid, Cobalt(II), copper(II), liquid-liquid extraction

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