

研究简报

Lewis碱性混合萃取剂碱度的测定

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摘要 提出一种利用萃取法间接测定Lewis碱性萃取剂碱度的简便方法, 选择常用的Lewis碱性萃取剂TOA/正辛醇和TRPO/煤油, 测定了其碱度, 为今后络合萃取剂的选择及其机理的研究提供理论指导.

关键词 [Lewis碱性萃取剂](#) [Lewis碱性混合萃取剂](#) [碱度](#) [测定](#)

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Determination of Basicity of Lewis Basic Extractant Mixture

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Abstract The extraction method based on the reversible chemical complexation is highly effective and selective for separating polar organic solutes from dilute solutions, and the basicity of the extractant is one of the most important parameters affecting the extraction equilibrium. In this paper, the determination of basicity of Lewis basic extractant and its mixture solvent was first proposed on the basis of extraction behavior of HCl and the appropriate stoichiometric ratio of solute to extractant. The basicities of two Lewis basic chemicals, *n*-octylamine and di-*n*-butylamine, and some basicity of typical Lewis basic extractant mixture, trioctylamine(TOA)/1-octanol and trialkylphosphine oxide(TRPO)/kerosene, were measured at 25 °C by using this method. The results show that this method was more accurate and simple, the basicity of Lewis basic chemicals was in agreement with the values reported in the literature, and the basicity of the mixture solvent depended on the extractant type and concentration.

Key words [Lewis basic extractant](#); [Lewis basic extractant mixture](#); [Basicity](#); [Determination](#)

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