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Two-phase titration of dialkyl dithiophosphoric acids based on their ion pair extraction

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Abstract

The distribution of ion pairs formed by a number of O,O-dialkyl dithiophosphoric acids and decylpyridinium (DP) in a water-chloroform two-phase system was studied. Extraction constants (KDP) were determined. A linear correlation between $\log KDP$ and steric and hydrophobic constants of substituents at the phosphorus atom was found. Two-phase potentiometric titration can be applied to the selective determination of dithiophosphoric acids. © 1998 MAEe cyrillic signK Hayka/Interperiodica Publishing.
