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Reaction of 2,3-dimethylmercaptopropionic acid with methylene blue as an indicator reaction for the kinetic determination of selenium

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Abstract

A new indicator reaction between 2,3-dimethylmercaptopropionic acid and Methyl Blue was proposed for the kinetic determination of selenium. The optimal reaction conditions were found. A linear relationship was observed between the induction period and the Se(IV) concentration in the range between 0.9 and 9.6 ng/mL Se. Masking with EDTA and solvent extraction with diethyldithiophosphoric acid can be used for the separation of interfering elements forming complexes with the reagent. © 2001 MAIK "Nauka/Interperiodica".
