

Kinetic spectrometric method for some anionic surfactant determination in aqueous solutions

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Abstract This work presents some studies about the achievement of alternative methods for the determination of two anionic surfactants used as plasticizers in the cement and concrete chemistry. The interactions occurred between Rhodamin B, Methyl violet and Fuchsin basic with concentrations of $0,3 \times 10^{-6}$ M with sodium salt of condensates naphtalene sulphonate formaldehyde and melamine sulphonate formaldehyde condensates can be exploited for the kinetic determination of the studied surfactants. Spectrometric measurements were performed on UV-Vis spectrometers Hewlett Packard 8452A with diode array detection and Camspec M330. Fixed time kinetic determinations were linear from 11-25 mg.L⁻¹ sodium salt of condensates naphtalene sulphonate formaldehyde with all three dyes and from 1- 5 mg.L⁻¹ melamine sulphonate formaldehyde condensates with Methyl violet and Fuchsin basic.

Keywords: : Anionic surfactants, plasticizer, Rhodamin B, Methyl violet, Fuchsin basic, kinetic determination
