

Quantification of group "B" vitamins by molecular spectroscopy in UV and visible regions in combined presence

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Abstract

The absorption spectra of the solutions of vitamin substances were analyzed, on the basis of which molar absorption coefficients of vitamins were calculated by the Bouguer-Lambert-Ber law. The abundances of components (mol/dm³) were defined in treble Multivitamins as a result of solving a system of linear algebraic equations with the use of the computed molar coefficients of light absorption in the solutions of vitamins B₂, B₆, B₉.

Results are obtained with an accuracy of 4%, which made in mass terms 0.04-0.10 mg.