

Analytical capabilities of micellar catalytic reactions for the formation of azo compounds in the systems of arylamines – NO₂⁻

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Abstract

Using the methods of UV, IR and electron spectroscopy we studied the influence of supramolecular self-organizing media of surface-active agents (surfactants) on the reaction of diazotization and azo coupling in systems: primary arylamines (*p*-nitro-, carboxy-*n*- and *p*-sulfoanilin) – diphenylamine – nitrite ion and 1-naphthylamine – nitrite ion. The formation of ion associates of azo compounds with dodecylsulphate-ions and the catalytic effects of micelles of surfactant has been established. Methods have been developed for determining nitrite ion at the level of MPC shares in food, minerals and natural waters characterized by good reproducibility.