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Oxidative decolorization of melanoidins, formed in *D*-lactose – *p*-toluidine system

© Igor S. Cherepanov,⁺* Guliamza M. Abdullina, and Viktor I. Kornev

Fundamental and Applied Chemistry Division. Udmurt State University. Universitetskava St., 1. Izhevsk, 426034. Udmurt Republic. Russia. Phone: +7 (3412) 91-64-37. E-mail: cherchem@mail.ru.

*Supervising author; ⁺Corresponding author

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Abstract

Oxidative decolorization processes of the brown melanoidin fractions, formed in the D-Lactose *p*-toluidine system in aqueous-ethanolic medium are studied by UV-Vis spectrophotometry. Magnification of decolorization degree in the presence of hydrogen peroxide in transition from acidic to neutral and basic media is shown. Oxidation and depolymerization processing, conditioned the decolorization, have hydroperoxideanion attack on the carbonyls and activation of the π -donor rings of melanoidins at the first stage of the reaction. Parallel oxidative processes in highly acidic media together with condensations, lead to colored products formation, is probable that complicates a decolorization degree assessment based on the spectrophotometry data obtained.