



"CLEANER PRODUCTION INITIATIVES AND CHALLENGES FOR A SUSTAINABLE WORLD"

Electrochemical Discoloration of Alizarin Red S Solutions in Dimensionally Stable Anode

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Abstract

Alizarin red S is a dye utilized by textile and leather industries. As it is a dye, alizarin red S is a potential environmental aggressor because it inhibited the photosynthesis in water bodies. In this work we evaluated the discoloration kinetic of alizarin red S in dimensionally stable anode in presence of phosphate buffer and, in some cases, in presence of sodium chloride also. Removal values of color higher than 90% were obtained after 5 hours of treatment of alizarin red S solutions containing 700 mg L^{-1} of this dye.

Keywords: Electrochemical discoloration, alizarin red S, rate constant