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Electrochemical behavior of tartaric acid at solid electrodes in aqueous and mixed solutions

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Abstract

Electrochemical behavior of *D*-tartaric acid at the Pt-, Cu-, Ta-, Cu-Hg-electrodes and the Cd-alloys with Sn, Ni, Hg, and In in aqueous and mixed solutions (water mixtures with acetone, ethanol, dimethylformamide, and pyridine) is studied by voltammetry. It is shown that the tartaric acid voltammograms always show waves related to the hydrogen ion discharge. A method recently suggested by authors allowed calculating the dissociation degrees at different stages, the concentrations of ionized and not ionized forms in dilute solutions of stereoisomers: *DL*-tartaric, *L*-tartaric, *D*-tartaric, and meso-tartaric acids. Simple empiric equations are suggested for the approximate calculating of some dissociation parameters for these acids.

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