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Electrochemical Behavior of Thiopyrimidines in Aqueous-Acetone Media at Mercury Electrode

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ABSTRACT

Polarographic studies of 1-(phenyl) 4, 4, 6-trimethyl pyrimidine-2-thione (PPT) and 1-(4'-chlorophenyl) 4, 4, 6-trimethyl pyrimidine-2-thione (4CPPT) at Dropping Mercury Electrode (DME) reveal that the product of the anodic reaction is strongly adsorbed at the mercury surface, as indicated by a prewave. The anodic wave of the pyrimidines extends over a fairly wide span of potential. The current of the main wave is proportional to the concentration up to 0.60 mM of PPT and 0.90 mM of CPPT in acetone water mixture at DME. This electrode is used as indicator electrode for polarographic titration of pyrimidine-2-thiones.

Keywords: Polarography, pyrimidine-2-thione, DME.