Short Communication

Electrochemical Behavior Zn(II) at Carbon Steel Electrode in Deep Eutectic Solvents Based on Choline Chloride

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Deep eutectic solvents prepared by mixture of choline chloride with urea, thiourea and ethylene glycol (1:2 molar ratio) were used to study the electrochemical behavior Zn(II) at carbon steel 1018 electrode. Zn deposits were immersed in a corrosive media (NaCl 3%wt). Composition of the solvent employed causes a difference in electrodeposition and corrosion behaviors, being diffusion coefficient value a critical parameter associated to these processes.

Keywords: carbon steel; deep eutectic solvent; urea; thiourea; ethylene glycol.

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