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Solvation Behaviour of Methyl Ammonium hydrochloride salts in DMF – Water Mixture at High Temperature (318 K)

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ABSTRACT

Conductance of Monomethyl Ammonium Hydrochloride, Dimethyl Ammonium Hydrochloride and Trimethyl Ammonium Hydrochloride have been studied in aqueous mixtures of DMF in a whole range of composition of mixtures at 318 K. The conductivity data have been analysed by the Debye – Huckel – Onsager and Krauss – Bay equations. The limiting molar conductance Λ_o and ion dissociation constants K_c have been evaluated at all the solvent compositions. The dependencies of the limiting molar conductances Λ_o and Walden products $\Lambda_o\eta_o$ as a function of mixture composition were analyzed in the aspects of ion–solvent interactions.

Keywords: Limiting molar conductance, ion dissociation constant, Debye – Huckel – Onsager, Krauss – Bay equation, Walden product.
