

عنوان مقاله:

Water Activities of Poly (propylene glycol) + Sodium Formate + H₂O System by Vapor Pressure Osmometry at 35°C

محل انتشار:

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خلاصه مقاله:

Water activities of ternary poly (propylene glycol) 400 (PPG) + sodium formate + H₂O system and corresponding binary systems were determined experimentally using the vapor pressure osmometry method (VPO) at 35°C. Furthermore, the modified NRTL model proposed by Wu et al. in 1998 to describe the liquid-liquid equilibria for aqueous polymer-polymer and polymer-salt systems along with the Pitzer-Debye-Huckel (PDH) equation, as an electrostatic term, were used for the correlation of the experimental water activity data. This model has six binary adjustable parameters that were estimated by the simultaneous fitting of experimental water activities for ternary aqueous PPG-sodium formate and those of the corresponding binary systems. Good agreement was obtained with the experimental data.

کلمات کلیدی:

Poly (propylene glycol); sodium formate; water activity; vapor pressure osmometry; Wu-NRTL model

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