

Viscosity Measurement for Mixtures of Choline Chloride based Solutions with Alcohols or Water

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Ionic liquids (ILs) have been researched for replacing conventional solvents. However, ILs possess some problems with environmental risk and economics. Recently, choline chloride based binary solutions as eco-friendly and economical solutions are receiving attention as alternatives to ILs. Features of the ILs such as low vapor pressure and nonflammability also can be prepared by blending quaternary ammonium salt with hydrogen donor. In this study viscosities of diluted mixture of choline chloride and hydrogen bonding donor by molecular solvents of alcohols or water were measured with temperature as well as composition. The temperature ranges were set by considering respective systems. The results are expected to be used basic property data for developing various chemical processes.