عنوان مقاله:

Influence of temperature and polymer mass fraction on density of polyetherimide solution in N-methyl-2-pyrrolidone and Chloroform solvents

محل انتشار:

هفتمین کنگره ملی مهندسی شیمی (سال: 1390)

تعداد صفحات اصل مقاله: 5

نویسندگان:

a arabi shamsabadi - *Department of Petrochemical Eng., Amirkabir University of Technology, Mahshahr Campus, Mahshahr, Iran*

m bahrami babaheydar - *Department of Petrochemical Eng., Amirkabir University of Technology, Mahshahr Campus, Mahshahr, Iran*

a kargari - *Corresponding Author Address: Department of Petrochemical Eng., Amirkabir University of Technology, Mahshahr Campus, Mahshahr, Iran*

s laki - *Department of Petrochemical Eng., Amirkabir University of Technology, Mahshahr Campus, Mahshahr, Iran*

خلاصه مقاله:

The density values of polyetherimide solutions in N-methyl-2-pyrrolidone (NMP) and Chloroform solvents have been measured at T = (298.15, 303.15, 308.15, and 313.15) K. The range of (0.05-0.3)for PEI mass fraction in NMP and (0.05-0.28) in Chloroform have been selected. Apparent specificvolume of the polymer and solvent has been computed from experimental data. Influence of temperature and polymer mass fraction on density of polyetherimide solution have been investigated. Results show density of both solutions will decrease by increasing temperature linearly.Also Densityfollowed a linear behavior with solute mass fraction, but for NMP, density will increase by increasing solute mass fraction and for Chloroform it will decrease.

کلمات کلیدی:

Density, Polyetherimide, NMP, Chloroform, Mass fraction, Temperature

لینک ثابت مقاله در پایگاه سیویلیکا: