

Ultrasonic Velocity and Related Parameters Study of PCE Water-Soluble Polymer

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Abstract: Density, viscosity and ultrasonic velocity of aqueous solutions of polycarboxylate ether [PCE] superplasticizer polymer at one of a thoughtful concentrations and temperatures (298.15, 303.13, 308.15 and 313.15)K. different interplay parameters were calculated by the investigational values of density, viscosity and ultrasonic velocity of polycarboxylate ether Water-Soluble Polymer. The viscosity of superplasticizer polymer solution will increase with growing awareness of aqueous answers of polycarboxylate ether. The ultrasonic speed increases from 298.15 K to 308.15K, at that time yet again decreases for 313.15K because the temperature will increase, density, adiabatic compressibility and intermolecular free length duration lower and ultrasonic velocities, acoustic impedance, molar volumes and molar sound velocities turned into discovered to will increase. The ultrasonic velocities to start with boom then decreases with growing consciousness of polycarboxylate ether. For 0.05 polycarboxylate ether it indicates most ultrasonic velocities

Keywords: superplasticizer, polymer, polycarboxylate ether, ultrasonic velocity

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