



Ultrasonic Velocity and Other Allied Properties of Some Alkali Earth Metal Carboxylates in Mixed Organic Solvents

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ABSTRACT

The solutions of carboxylates of Strontium and barium (caprate laurate and myristate) have been used in a mixture of chloroform-propylene glycol (70%-30%v/v) at a constant temperature to determine the ultrasonic velocity. The data were used to evaluate the C.M.C. (critical micelle concentration) and to study the soap-soap and soap-solvent interaction. The various acoustic parameters viz: intermolecular free length, adiabatic compressibility, apparent molar compressibility and acoustic impedance have been evaluated. The results confirm that there is a significant interaction between the carboxylate and solvent molecules.

Keywords: Alkaline earth metal carboxylates, ultrasonic velocity, molar volume and C.M.C.
