

## Abstract

A lot of chemical and others industries use non-Newtonian fluids in their processes.<sup>1</sup> One of the most important characteristics is the influence of shear rate on the fluid viscosity. In this work, we present the rheological properties of aqueous sodium alginate (NaAlg) solutions. The molecular weight of this polymer was calculated using Huggins and Kramer equations and its intrinsic viscosity was determined for the polymer. The apparent viscosity and the influence of shear rate on polymer concentration in aqueous solutions were measured. The effect of solvent on rheological behaviour was also studied. Dynamic viscoelastic moduli, thixotropy and oscillatory dynamic tests also showed the nature of the NaAlg solutions