Piperazine-based homo- and copolymers containing trivalent and quaternary nitrogen functionalities. Ali, Sk. Asrof; Wazeer, Mohammed I. M.; Ahmed, S. Zaka. Department of Chemistry, King Fahd University of Petroleum and Minerals, Dhahran, Saudi Arabia. Journal of Applied Polymer Science (1998), 69(7), 1329-1334. Publisher: John Wiley & Sons, Inc.

Abstract

The synthesis and soln. properties of poly(1,1-diallyl-4-hydropiperazine dichloride) (I), a dicationic polymer, and poly(1,1-diallylpiperazinium chloride) (II), a bifunctional polymer with trivalent and quaternary nitrogens, and their corresponding copolymers with sulfur dioxide, poly(I-SO2) (III) and poly(II-SO2) (IV), are discussed. Dicationic polymers I and III were found to have less pronounced polyelectrolyte effects than their monocationic counterparts II and IV.