

Piperazine-based homo- and copolymers containing trivalent and quaternary nitrogen functionalities

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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.