

Microwave Assisted Synthesis and Characterization of Polyethers Based On 2, 4-Dibromo-6-Ethylquinoline

Upendra R. Patel*, Pradhuman A. Parmar

Department of chemistry, M.N. College, Visnagar, Gujarat, India

ABSTRACT

A rapid polymerization reaction of 2, 4-dibromo-6-ethylquinoline with aromatic diols were preformed with a domestic microwave oven by using Tetra butyl ammonium bromide phase transfer catalyst. The polymerization reactions, in comparison with conventional heating polycondensation, proceeded rapidly. The polymerizations gave the corresponding polyethers with inherent viscosities of 0.44– 0.72 dL/g. Prepared polyether compounds also characterized by TGA, GPC, FT-IR. Antimicrobial activity of synthesized polyethers are also good, they can be used as self-sterilized surface.

Keywords : Polymerization, phase transfer catalyst, GPC, polyether.