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MICROWAVE ASSISTED SYNTHESIS OF ACETONE – FORMALDEHYDE RESIN

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Abstract

The study focuses on the condensation of acetone and formaldehyde under microwave irradiation, a well-established technique to promote chemical reactions, with a high potential to contribute to the sustainable chemistry. Under these conditions the condensation was reduced to 30 minutes compared to 2 – 4 hours required by conventional polymerization process. Highly viscous resins were obtained in very good yields, and tested for their physical properties in the view of further practical use of these resins. Conventional synthesis was also performed.

Key words: acetone-formaldehyde resin, microwave irradiation, rheological properties

Received: March 2011; Revised final: July, 2011; Accepted: August, 2011

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