POLY (BUTYL ACRYLATE) GRAFTED NATURAL RUBBER LATEX: PREPARATION AND FILM FORMING PROPERTIES

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Abstract

Natural rubber latex grafted with poly (butyl acrylate) (PBA) was prepared by emulsion polymerization. Two types of initiator including redox system [cumene hydroperoxide (CHP)/tetraethylene pentamine(TEPA)] and thermolysis initiator (potassium persulfate) were used. At used condition, the latex was still stable. Two initiator systems gave high percentage conversion. 1H-NMR results showed that the latex prepared in this emulsion polymerization contained graft copolymer. Grafting reaction using two different initiator systems led to brittle film and the film was more brittle when redox initiator was used.

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