

## Preparation and Characterization of High Solid & Low Viscosity Water Born Removable typed Acrylic PSA using Seeded Polymerization

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Water born removable type acrylic pressure sensitive adhesives are prepared by seeded emulsion polymerization of 2-ethylhexyl acrylate(2-EHA), n-butyl acrylate(BAM), methyl methacrylate(MMA) and acrylic acid(AA). Cross-linking agent was Hexanediol diacrylate (HDDA) used.

In this study, the effect of acrylic acid contents and cross-linking agent weight on the adhesive properties were investigated. When the conditions of seeded polymerization were concentration of seed 5part, polymerization temperature 80°C and polymerization time 4hr, the conversions of water born seeded emulsion polymerization were maximum. In contrast, the peel strength was improved as the molecular weight of polymer and concentration of acrylic acid increased. Corss-linking agent(HDDA) weight percentage increases, Showed a tendency to decreased of peel strength.