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Preparation of acrylic resins modified with epoxy resins and their behaviors as binders of waterborne printing ink on plastic film

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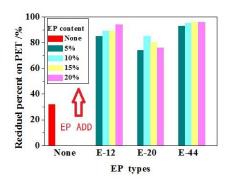
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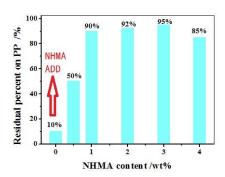
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Graphical abstract





Abstract

Polymers have low-energy surfaces and are difficult to be adhered by waterborne inks due to the higher surface tension of the waterborne inks. An approach to prepare acrylic resin used as a binder of waterborne printing ink on plastic film with excellent adhesion and water resistance is described. The epoxy resin is incorporated into the acrylic resin to enhance the molecular interactions between binder molecules in ink and surface molecules of plastic film. The binder

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