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EFFECT OF EPOXY ON RHEOLOGICAL BEHAVIOR OF ACRYLIC POLYMER/SIO2 BLENDS

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We investigated the rheological properties of multi-components material which was used for package of IC-chip in semiconductor device and composed of acrylic polymer (AP), epoxy (EP) and silica particle (SiO2). The effect of EP on the linear viscoelasticity and uniaxial elongational viscosity of AP/SiO2 was investigated. From the result of linear viscoelasticity, we found AP/SiO2 and AP/EP/SiO2 result from the well-dispersed particle system and weakly flocculated systems, respectively. We concluded that low molecular weight component was useful to change the affinity between polymer and filler.