

## Effects of Power-Ultrasound on Reactive Blending of PC/PCCD

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Polycarbonates(PC) are thermoplastic materials with excellent transparency and high impact resistance, and cycloaliphatic polyesters, such as poly (1,4-cyclohexane-dimethylene-1,4-cyclohexane-dicarboxylate) (PCCD), have attracted more attention in the plastic industry because of their outstanding properties, such as weather-ability, chemical resistance, and resistance to UV radiation. A blend of polycarbonate and polyester is a polymer with high impact strength, improved chemical resistance, and excellent aesthetics. Our research focused on the analysis of the effect of ultrasonic irradiation on the polymer blend system. In this study, we prepared the PC/PCCD blend by imposing ultrasonic energy or adding some catalyst during solution blending. The change of Tg (glass-transition temperature) and IR-spectrum were investigated with ultrasound-assisted blending, and then we could conclude that ultrasound-assisted blending process can provide an useful information associated with the reactive blending of polymer.