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## The Control of Polycarbonate (PC)/ Polybutyleneterephthalate (PBT) Phase Morphology by Variation of Chemical Compositions and Processing Conditions

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Immiscible engineering plastic compounds show distinct phase morphology reflecting their chemical compositions as well as the previous processing history. Generally, the smaller size of the dispersed phase favors the more enhanced mechanical properties such as impact strength and fatigue resistance. In this study, with PC/PBT blends, the effect of compositions, viscosity ratios and injection molding conditions on the phase morphology were systematically investigated. Through careful control of those variables, a morphology control protocol, by which one can change PC/PBT morphology from micron to nano-scale, was obtained. The physical properties of those PC/PBT blends were also measured and interpreted in terms of phase structures.