Properties of Polycarbonate/LC-Polyester Blends

김은 영 , 김 한도

부산대학교 섬유공학과

The properties of the films of polycarbonate (PC)/
thermotropic liquid crystalline polyester (LC-polyester)
blends (polymer composites) prepared by Brabender plasticorder using a slit die have been studied. The dynamic
mechanical and thermal properties, and mechanical properties of the films were observed by Rheovibron and
Instron. Micro-structural changes were seen by the X-ray
diffraction and measurement of birefringence.

The LC-polyester phase in the films prepared in this inverstigation exhibited oriented fibrillar structure from morphological observation.

The strongest shear dependence was observed by blending of LC-polyester to PC. The tensile modulus and stregth, orientation of fibril, glass transition temperature and crystallinity increased with increasing LC-polyester content in the blends.