POLYESTERS: PHASE BEHAVIOR IN BINARY BLENDS: AMORPHOUS, CRYSTALLINE, LIQUID CRYSTALS, AND ON TRANSFEACTION

ROGER S. PORTER

Polymer Science and Engineering Department University of Massachusetts Amherst, Massachusetts 01003 (USA)

ABSTRACT

Thermal and mechanical studies on several linear polyesters have revealed their behavior in crystalline, liquid crystalline, and amorphous phases. The phase behavior of binary compositions has also been studied by DSC and in combinations including the polycarbonate of bisphenol-A. Regions of amorphous compatibility and incompatibility have been identified. The conditions for transesterification have also been determined and the thermal properties measured for the resultant new polyesters.