

Stereocomplex Formation via Aerosol Solvent Extraction System of Poly(L-lactic acid) and Poly(D-lactic acid) Crystals

윤희석^{1,2}, 이윤우^{1,2,*}

¹서울대학교 화학생물공학부;

²서울대학교 화학공정신기술연구소

(ywlee@snu.ac.kr*)

Poly(L-lactide), PLLA, and poly(D-lactide), PDLA, like other chiral polymers can form a racemate, the physical properties of which are different from those of the individual enantiomers. It is well-known that D- and L-forms of low molecular weight compounds can produce racemic crystals upon mixing if their molecular affinity is sufficiently strong. In the present study, D- and L-lactides, which are the cyclic monomers of PDLA and PLLA, respectively, possess a melting point at around 170 oC. In contrast, their racemic compound melts at around 225 oC, a higher temperature than the melting point of PDLA and PLLA.