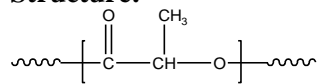


Sample Name: Polylactide

Sample #: P3935A-LA (L-Form)

**Structure:**

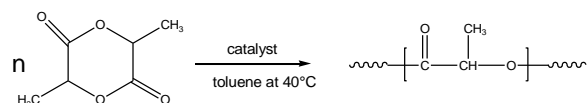


**Composition:**

Mn x 10 <sup>3</sup>	PDI
9.5	1.15

**Synthesis Procedure:**

The polymerization of (3S)-cis 3, 6-dimethyl-1,4-dioxane-2,5-dione was initiated with an aluminum-based catalyst and the reaction was carried out in apolar solvent.



**Purification:**

Catalyst residues were removed by repeated extraction with an aqueous EDTA solution (0.1 mol L<sup>-1</sup>) and the polymeric solution was then washed with water up to neutral pH. Toluene was removed under reduced pressure and the polymer was precipitated employing a large excess of hexane. The polymer was then redissolved in benzene and filtered followed by freeze drying.

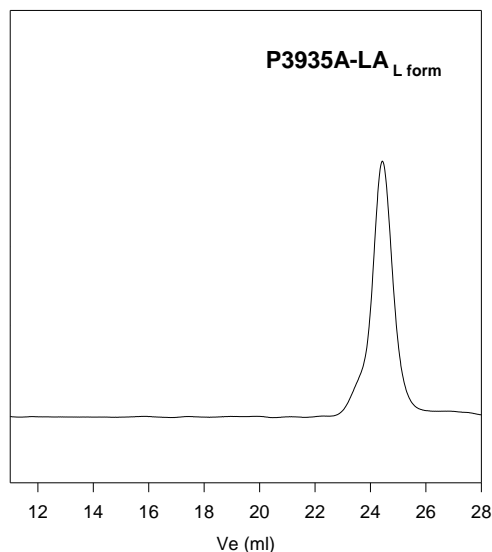
**Characterization:**

The molecular weight and polydispersity index (PDI) are obtained by size exclusion chromatography.

**Solubility:**

Poly( $\epsilon$ -caprolactone) is soluble in toluene, THF, CHCl<sub>3</sub> and CH<sub>2</sub>Cl<sub>2</sub>. The polymer is insoluble in methanol, hexane and ether.

**SEC of Homopolymer:**



Size exclusion chromatograph of poly(L-lactide):

M<sub>n</sub>=9500, M<sub>w</sub>=11000, PI=1.15