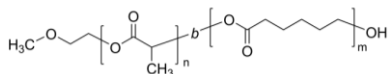


Sample Name:

**Poly(lactide)-b-poly( $\epsilon$ -caprolactone)**

Sample #: **P42320-LACL (DL form)**

**Structure:**



**Composition:**

Mn x 10 <sup>3</sup> LA-b-CL	Mw/Mn (PDI)
40.0-b-45.0	1.4

**Synthesis Procedure:**

Poly Lactide block was extended with Caprolactone.

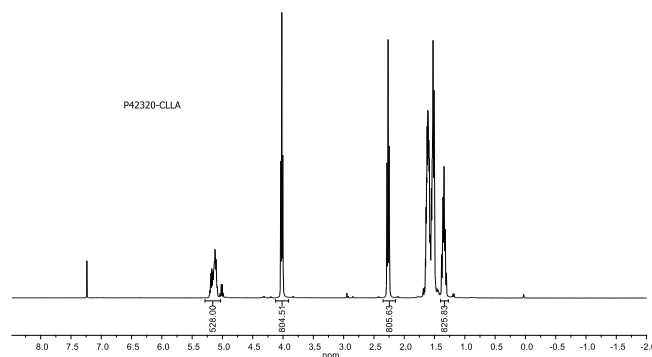
**Characterization:**

An aliquot of the polystyrene block was terminated before addition of - $\epsilon$  caprolactone and analyzed by size exclusion chromatography (SEC) to obtain the molecular weight and polydispersity index (PDI). The final block copolymer composition was calculated from <sup>1</sup>H-NMR spectroscopy by comparing the peak area of the styrene protons at 6.3-7.2 ppm with the peak area of - $\epsilon$ -caprolactone protons at 4.1 ppm. Block copolymer PDI is determined by SEC.

**Solubility:**

Poly(lactide)-b-poly( $\epsilon$ -caprolactone) is soluble in THF, Chloroform, DMF, and precipitated in methanol and hexanes.

**<sup>1</sup>H NMR spectrum of the sample:**

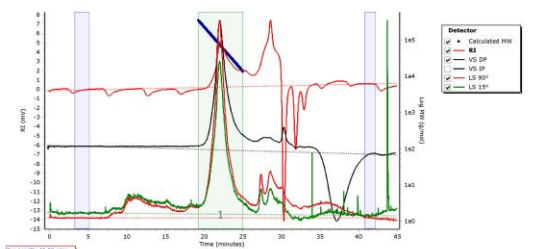


**SEC profile of the PLA block:**

Agilent GPC/SEC Software

P42320-LA

Chromatogram Plot



Peak	Mp (g/mol)	Mn (g/mol)	Mw (g/mol)	Mz (g/mol)	Mz+1 (g/mol)	Mz (g/mol)	PDI
Peak 1	70738	40047	55744	71780	86012	66605	1.392

**SEC profile of the block copolymer:**

Agilent GPC/SEC Software

P42320-LA-CL

Chromatogram Plot

