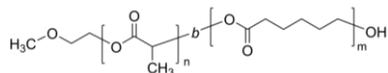


Sample Name:

**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.

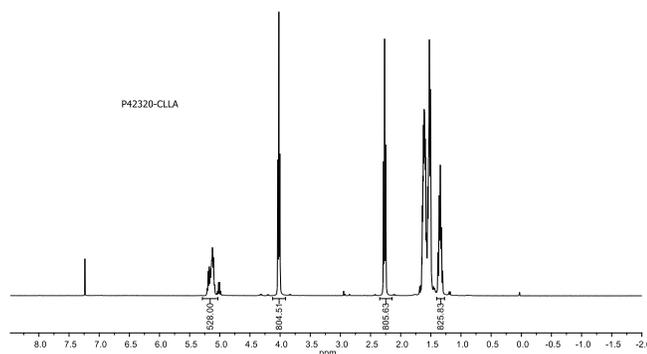
Characterization:

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.

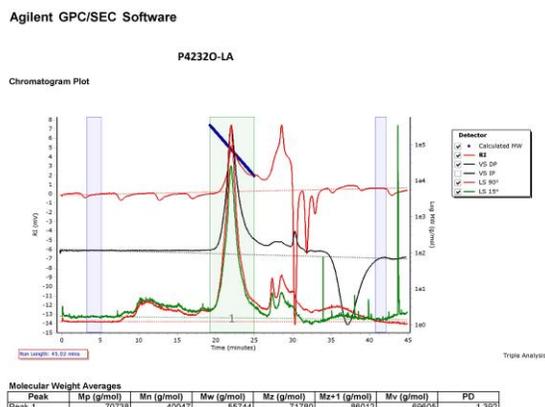
Solubility:

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:



SEC profile of the block copolymer:

