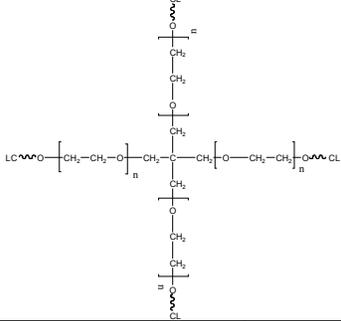


Sample Name:
Four arm Poly(ethylene oxide –b-ε-caprolactone)

Sample #: **P10321-4EOCL**

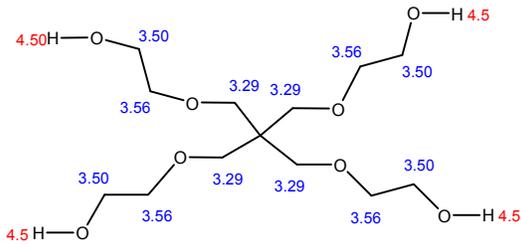


Mn x 10 ³ Total (branch)	PDI
1.2-b-3.0 Mn : (0.30-b-0.75)	1.2
Dp of each branch: EO-b-CL 7.0-b-6.5 (average)	

Synthesis Procedure:

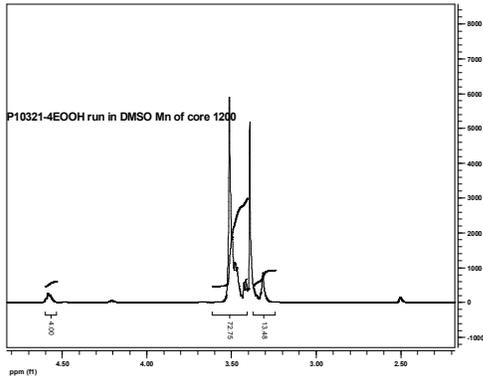
The polymer was prepared by ring opening polymerization of caprolacton using Tin octoate as the catalyst and pentaerthritol ethoxylate that bears Mn of 800. T

Characterization data for the core bearing Mn : 224

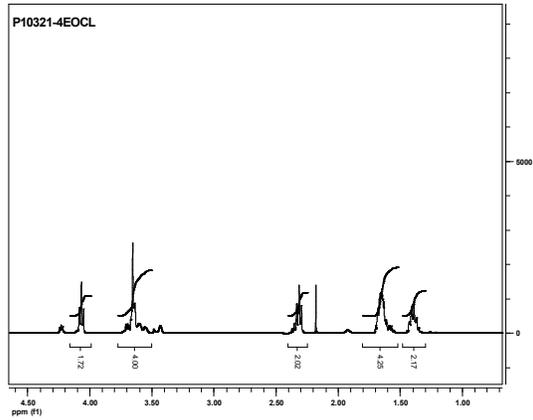


Chemical shifts in DMSO

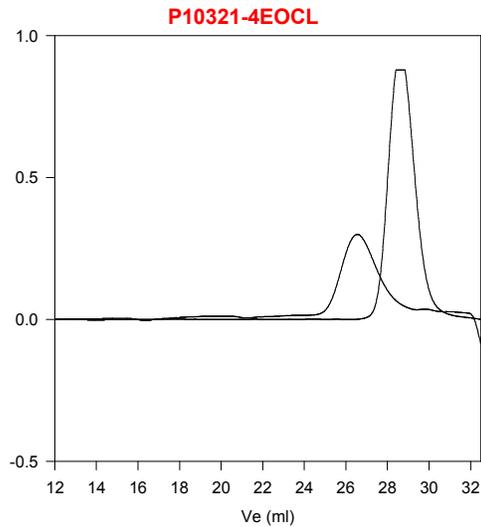
HNMR of the core:
run in DMSO



HNMR of the Polymer:



SEC of the polymer:



Size Exclusion Chromatogram of core based on pentaerthritol ethoxylate

— Mn=1200 Mw=1300, Mw/Mn=1.10
mn total: 4EOCL Mn 1200-b-3000 Mw/Mn 1.2

Characterization.

The Mn of the polymer is calculated from 1H-NMR spectroscopy by comparing the peak area of the core protons at about about 3.6 ppm with the ε-caprolactone protons at about 4.1 ppm. Polydispersity is determined by size exclusion chromatography (SEC): Varian liquid chromatograph equipped with UV and refractive detector. SEC columns from Supelco were used with THF containing 2 vol% (Et)3N as the eluent.