

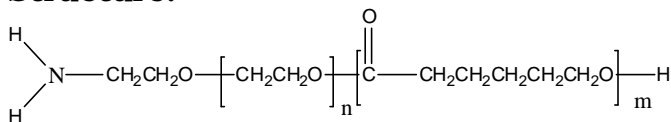
Sample Name:

Amino end functionalized

Poly(ethylene oxide -b- ε-caprolactone)

Sample #: P10275A- NH2EGCL

Structure:



Composition:

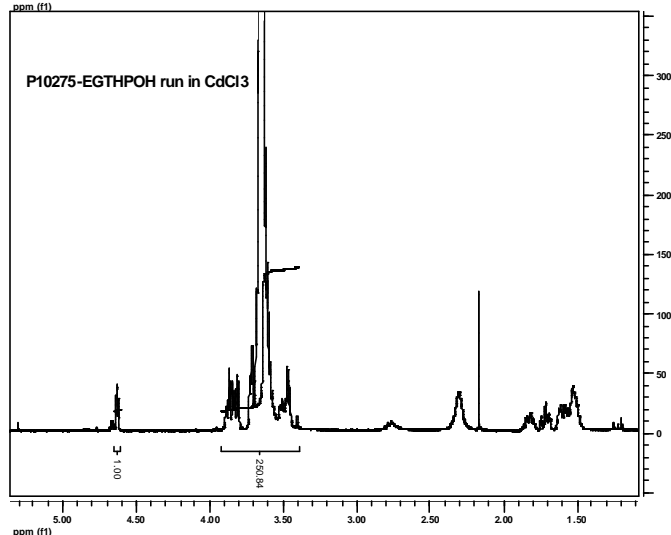
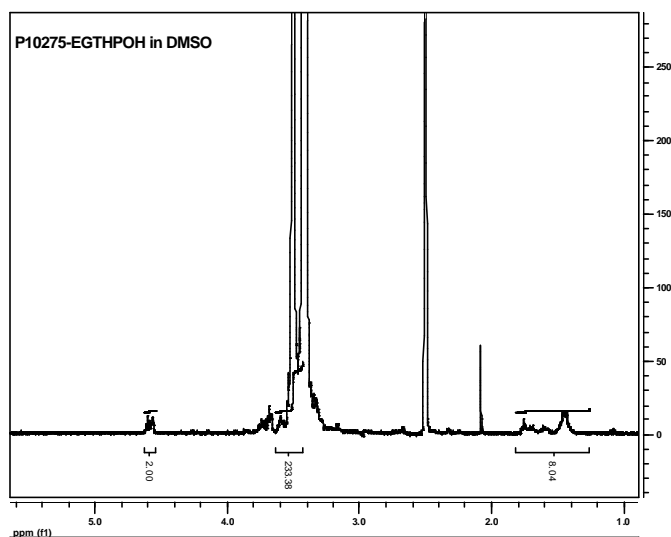
| Mn x 10 <sup>3</sup><br>NH2 EG-b-PCL | PDI  | NH2<br>functiona<br>lity |
|--------------------------------------|------|--------------------------|
| 2.6-b-3.0                            | 1.10 | >95%                     |

Characterization:

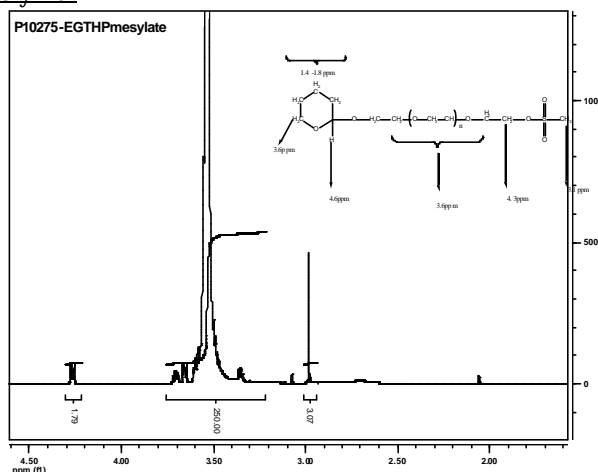
Polymer was analyzed by size exclusion chromatography (SEC) to obtain the molecular weight and polydispersity index (PDI). The polymer obtained at each step and the final block copolymer composition was calculated from <sup>1</sup>H-NMR spectroscopy by comparing the peak area of the ethylene oxide protons at about 3.6 ppm with the ε-caprolactone protons at about 4.1 ppm.

**<sup>1</sup>H-NMR Spectrum of the polymer**

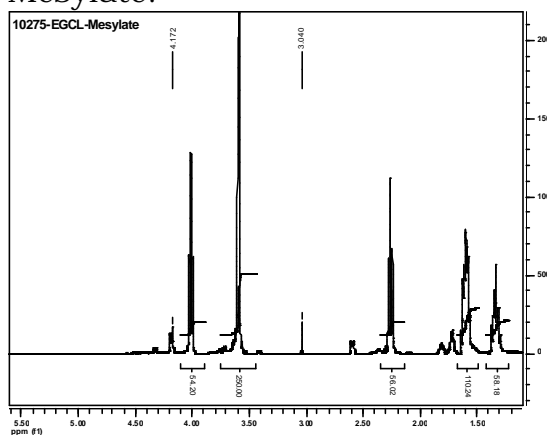
ε-OH-ε-pyran terminated PEG used in this polymer



ε-Mesylylate-ε-pyran terminated PEG used in this polymer



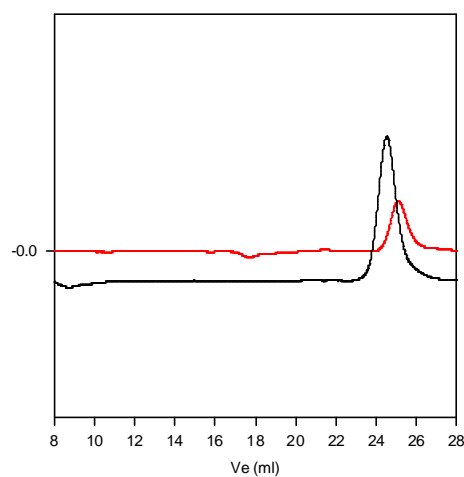
HMR of the diblock copolymer EGCL-Mesylylate:



HNMR of NH2EGCLOH

**SEC of the block copolymer:**

P10275A-NH2EGCL



Size exclusion chromatograph of NH2 terminated PEG-b-CL

PEG Block: M<sub>n</sub>=2600, M<sub>w</sub>=2800, PI=1.06

NH2-EG-b-CL: 2,600-b-3000 Mw/Mn:1.10