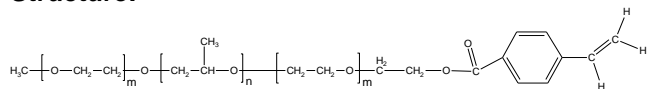


Sample Name:**Styrene end Functionalized Poly(ethylene oxide-b-propylene oxide -b- ethylene oxide)****Sample #:** P11219-EOPEOStyrene**Structure:****Composition:**

Mn x 10 ³	PDI
0.440-b-1.3-b-0.3	1.09
Dp: 11-b-22-b-7	

Synthesis Procedure:

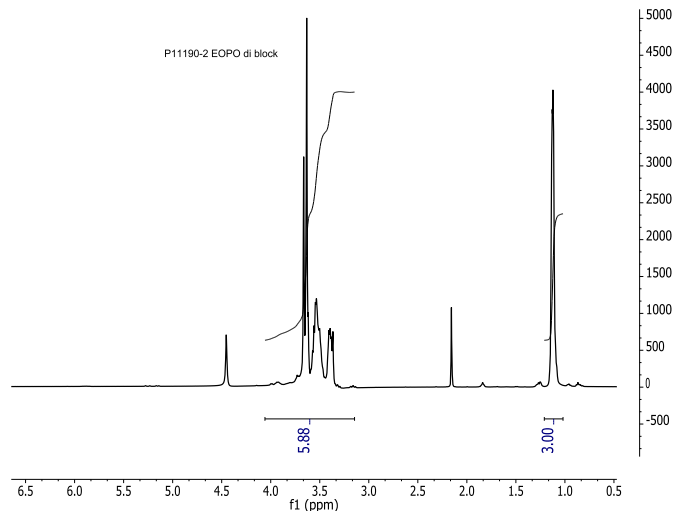
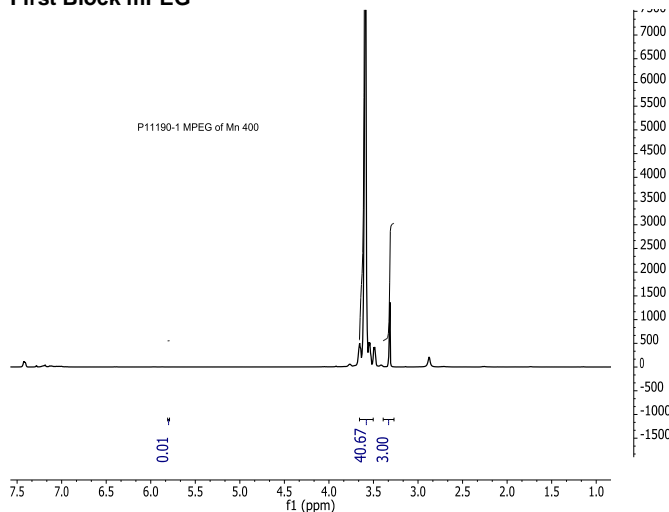
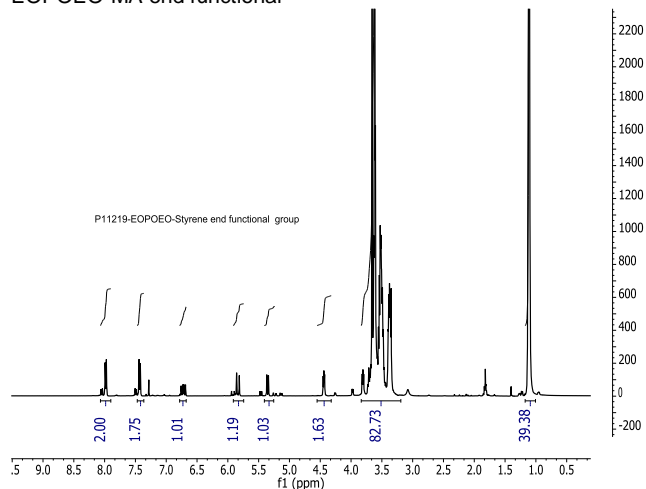
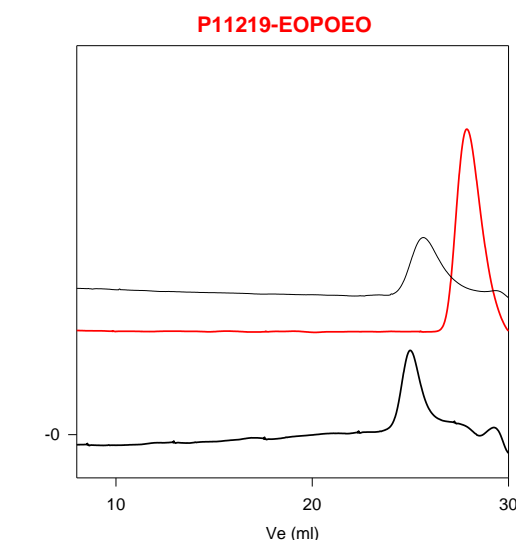
Poly(ethylene oxide-b-propylene oxide-b-ethylene oxide) is prepared by living anionic polymerization with sequence addition of monomer EO and propylene oxide. Functionalization was carried out in DCM using methacryloyl chloride.

Characterization:

The molecular weight and polydispersity index of this polymer were determined by size exclusion chromatography (SEC) using a Varian liquid chromatograph equipped with a UV and refractive index detector.

Solubility:

Polymer is soluble in THF, CHCl₃, and toluene.

HNMR of EOPEO Macromonomer: EOPEO**First Block mPEG****EOPEO-MA end functional****SEC of Sample:**

Size exclusion chromatography of the product:

- Poly(ethylene glycol methyleher) : $M_n=440$, $M_w=480$, $M_w/M_n=1.09$
- Poly(ethylene glycol methyleher-b-PO) : $M_n=440-1300$, $M_w/M_n=1.09$
- Poly(ethylene glycol methyleher-b-PO-b-EO) : $M_n=440-1300-300$, $M_w/M_n=1.09$