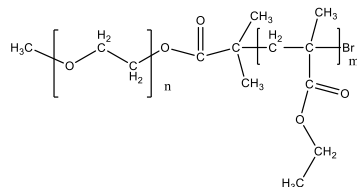


Sample Name: Poly(ethylene oxide)-b-Poly(ethyl methacrylate)

Sample #: P43945B-EOEtMA

Structure:

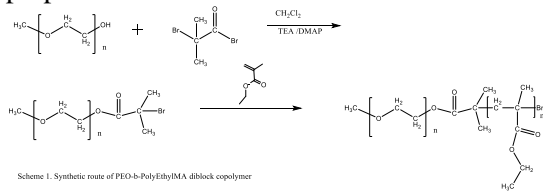


Composition:

Mn x 10 ³	PDI
PEO-b-EtMA	
5.0-b-5.5	1.45

Synthesis Procedure:

Poly(Ethylene oxide-ethyl methacrylate) is prepared as shown in the scheme below:



Scheme 1. Synthetic route of PEO-b-Poly(Ethyl methacrylate) diblock copolymer

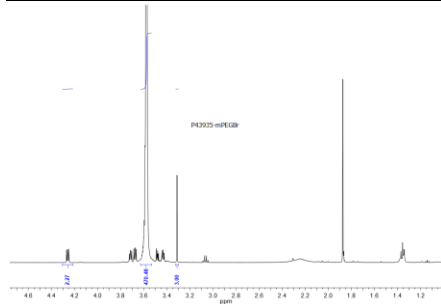
Characterization:

Polymer composition was determined by ¹H NMR taking the integration of PEG block at 3.66 ppm and methyl ester of EtMA block at 3.92 ppm. Molecular weights of the first block and the Mw/Mn of the final and the first block was determined by SEC in THF.

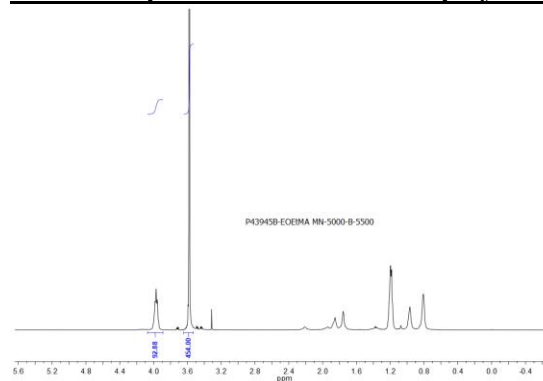
Solubility:

Poly(ethylene oxide -b- EtMA) is soluble in CHCl₃, THF, toluene. The polymer precipitated out from hexane.

¹H NMR spectrum of the PEGBr Mn of 5000:



¹H-NMR Spectrum of the block copolymer:



SEC profile of the Sample:

