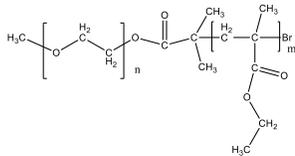


Sample Name: Poly(ethylene oxide-b-Ethyl methacrylate)

Sample #: P43913-EOEtMA

Structure:

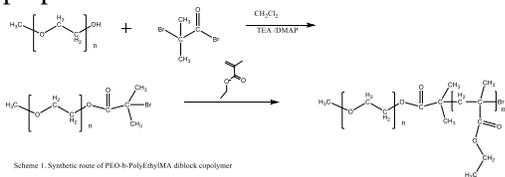


Composition:

Mn x 10 ³ PEO-b-EtMA	PDI
5.0-b-6.5	2.4

Synthesis Procedure:

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



Scheme 1. Synthetic route of PEO-b-PolyEtMA diblock copolymer

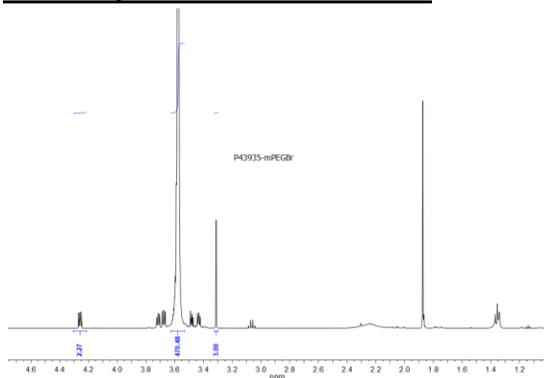
Characterization:

Polymer composition was determined by H 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.

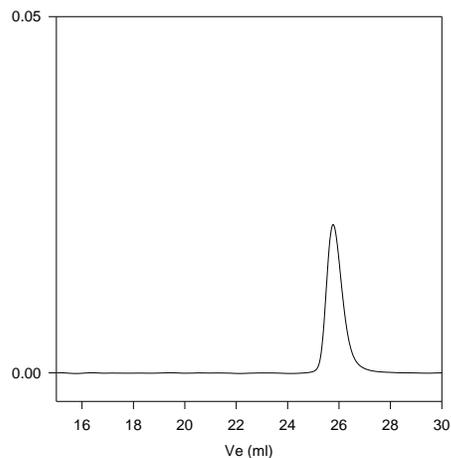
Solubility:

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

HNMR spectrum of the mPEGBr:

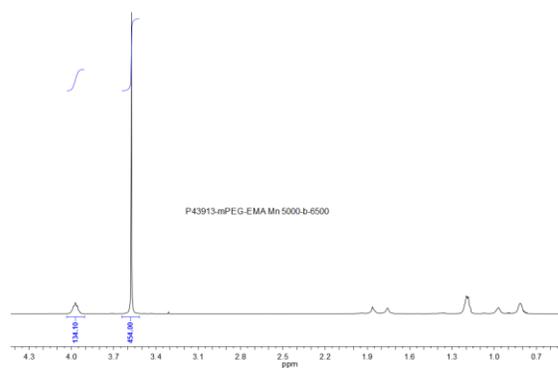


SEC profile of the PEG Sample:
P43935-EGOCH3Br



Size exclusion chromatography:
— Bromo terminated Poly(ethylene glycol methyl ether),
M_n=5,000, M_w=5,400, PDI=1.06

1H-NMR Spectrum of the block copolymer:



SEC elugram of the block copolymer:

