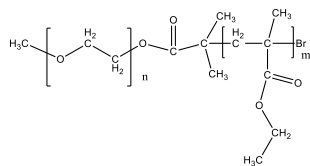


**Sample Name:** Poly(ethylene oxide)-b-Poly(ethyl methacrylate)

**Sample #:** P43945A-EOEtMA

**Structure:**

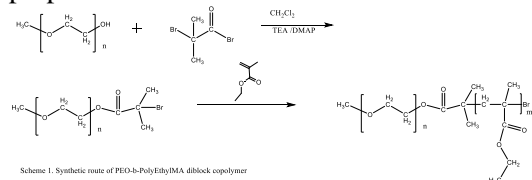


**Composition:**

Mn x 10 <sup>3</sup> PEO-b-EtMA 5.0-b-8.0	PDI 1.5
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**Synthesis Procedure:**

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



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

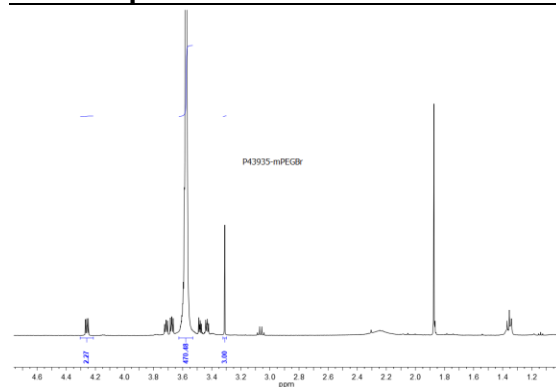
**Characterization:**

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.

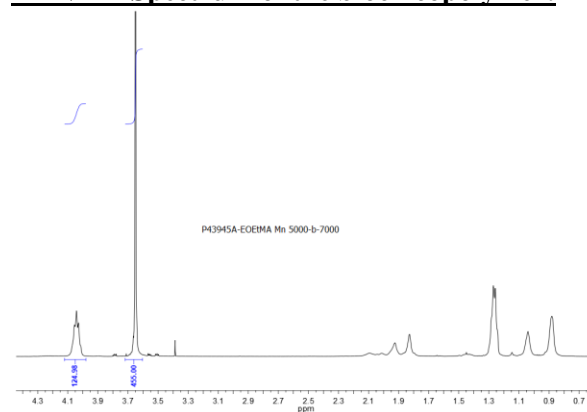
**Solubility:**

Poly(ethylene oxide -b- EtMA) is soluble in CHCl<sub>3</sub>, THF, toluene. The polymer precipitated out from hexane.

**H NMR spectrum of the PEGBr Mn of 5000:**



**1H-NMR Spectrum of the block copolymer:**



**SEC profile of the Sample:**

