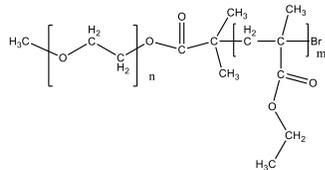


**Sample Name: Poly(ethylene oxide)-b-Poly(ethyl methacrylate)**

**Sample #: P43924-EOEtMA**

**Structure:**

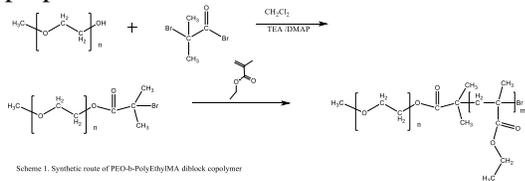


**Composition:**

Mn x 10 <sup>3</sup> PEO-b-EtMA	PDI
5.0-b-6.0	1.14
Microstructure of Poly EtMA S:H:I contents= 60:36:4	

**Synthesis Procedure:**

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



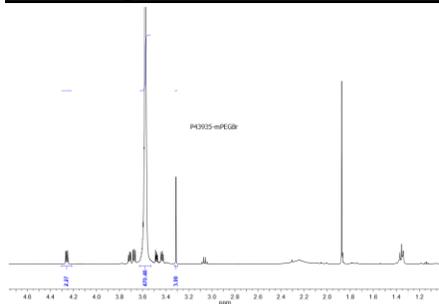
**Characterization:**

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:**

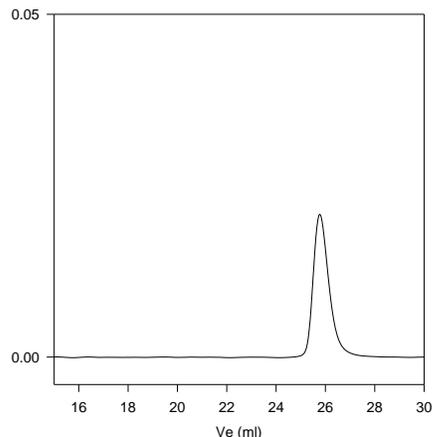
Poly(ethylene oxide -b- EtMA) is soluble in CHCl<sub>3</sub>, THF, toluene. The polymer precipitated out from hexane.

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



**SEC profile of the Sample:**

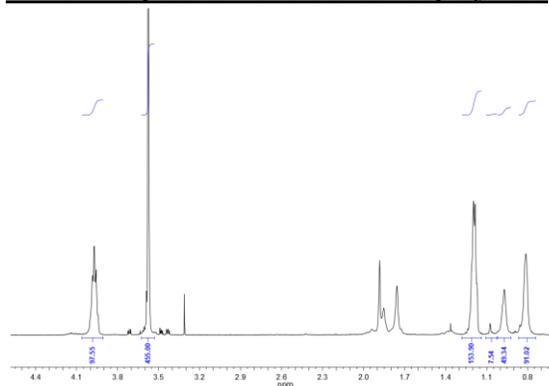
P43935-EGOCH3Br



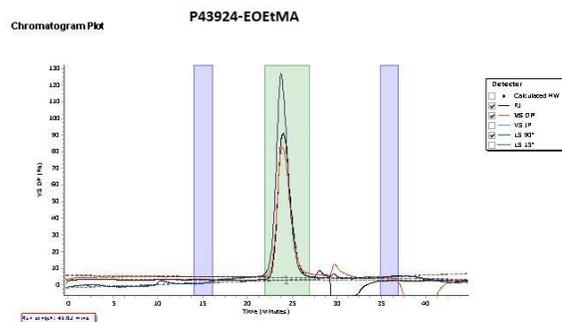
Size exclusion chromatography:

— Bromo terminated Poly(ethylene glycol methyl ether),  
M<sub>n</sub>=5,000, M<sub>w</sub>=5,400, PDI=1.06

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



**SEC of the block copolymer:**



Molecular Weight Averages							
Peak	Mp (g/mol)	Mn (g/mol)	Mw (g/mol)	Mz (g/mol)	Mz-1 (g/mol)	Mw (g/mol)	PDI
Peak 1	13201	10985	12566	14033	15429	13492	1.144