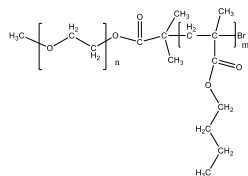


**Sample Name:** Poly(ethylene oxide)-b-Poly(N-butyl methacrylate)

**Sample #:** P43927-EOnBuMA

**Structure:**

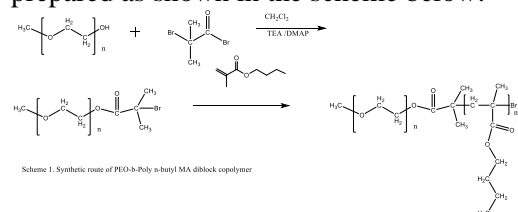


**Composition:**

Mn x 10 <sup>3</sup> PEO-b-nBuMA	PDI
5.0-b-5.3	1.19

**Synthesis Procedure:**

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



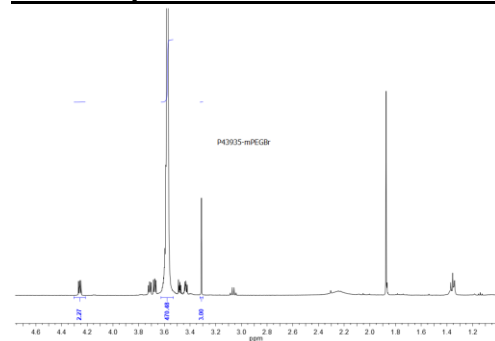
**Characterization:**

Polymer composition was determined by H NMR taking the integration of PEG block at 3.66 ppm and nButyl ester of n-BuMA 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.

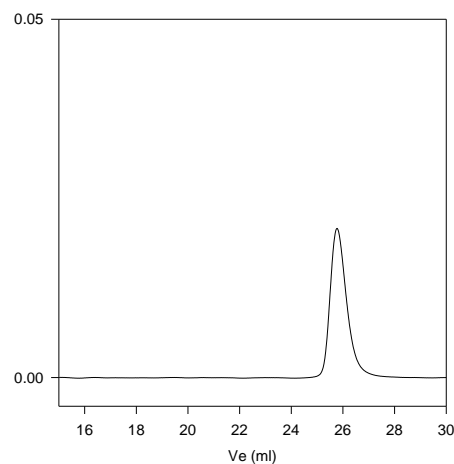
**Solubility:**

Poly(ethylene oxide -b- nBuMA) 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 PEG Sample:**  
P43935-EGOCH<sub>3</sub>Br



Size exclusion chromatography:  
Bromo terminated Poly(ethylene glycol methyl ether),  
M<sub>n</sub>=5,000, M<sub>w</sub>=5,400, PI=1.06

**SEC of the block copolymer:**

