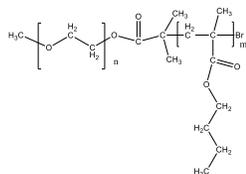


Sample Name: Poly(ethylene oxide)-b-Poly(N-butyl methacrylate)

Sample #: P43927-EONBuMA

Structure:

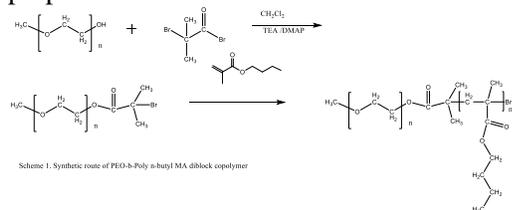


Composition:

Mn x 10 ³ 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:



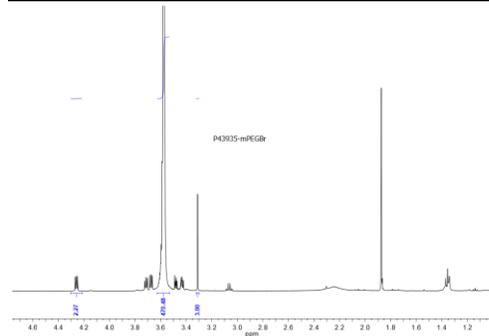
Characterization:

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:

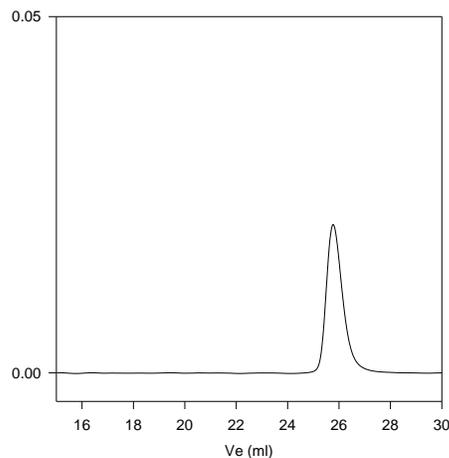
Poly(ethylene oxide -b- nBuMA) is soluble in CHCl₃, THF, toluene. The polymer precipitated out from hexane.

H NMR spectrum of the PEGBr Mn of 5000



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, PI=1.06

SEC of the block copolymer:

