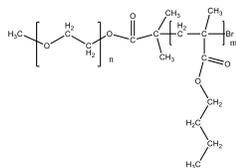


Sample Name: Poly(ethylene oxide)-b-Poly(N-butyl methacrylate)

Sample #: P43925-EOnBuMA

Structure:

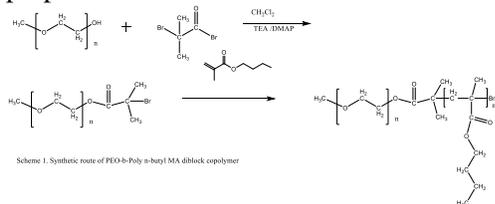


Composition:

Mn x 10 ³ PEO-b-nBuMA	PDI
5.0-b-5.6	1.34

Synthesis Procedure:

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



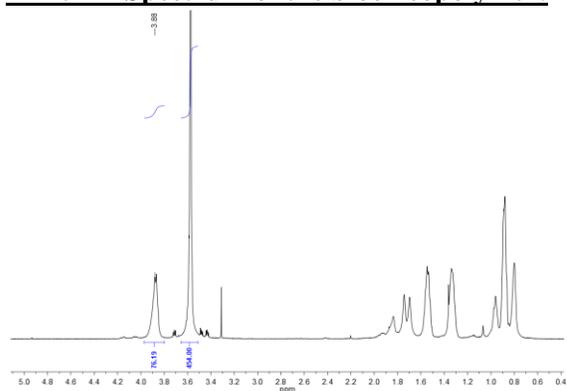
Characterization:

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.

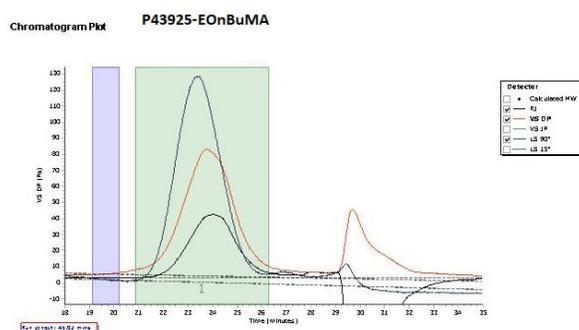
Solubility:

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

¹H-NMR Spectrum of the block copolymer:



SEC elugram of the block copolymer:



Molecular Weight Averages							PDI
Peak	Mp (g/mol)	Mn (g/mol)	Mw (g/mol)	Mz (g/mol)	Mz+1 (g/mol)	Mv (g/mol)	
Peak 1	12112	10528	14167	19003	25053	17888	1.348