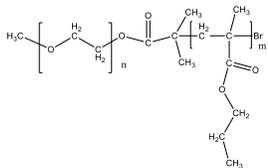


Sample Name: Poly(ethylene oxide)-b-(N-propyl methacrylate)

Sample #: P43974-EOnPrMA

Structure:

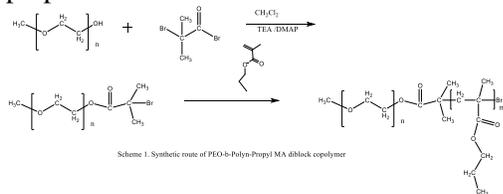


Composition:

Mn x 10 ³ PEO-b-In-PrMA	PDI
5.0-b-4.5	1.55
Microstructure of Poly NPrMA block S:H:I=60:38:2	

Synthesis Procedure:

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



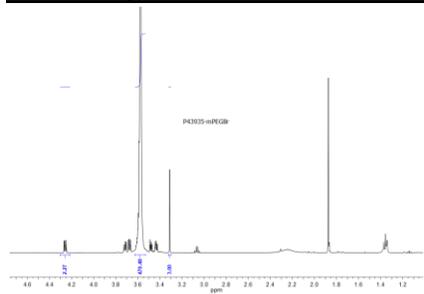
Characterization:

Polymer composition was determined by H NMR taking the integration of PEG block at 3.66 ppm and methyl ester of PMMA block at 3.62 ppm. Molecular weights of the first block and the Mw/Mn of the final and the first block was determined by SEC in THF.

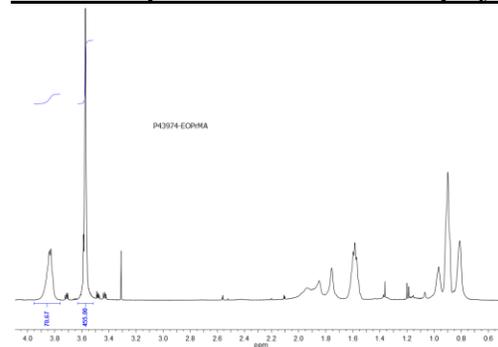
Solubility:

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

H NMR spectrum of the PEGBr Mn of 5000

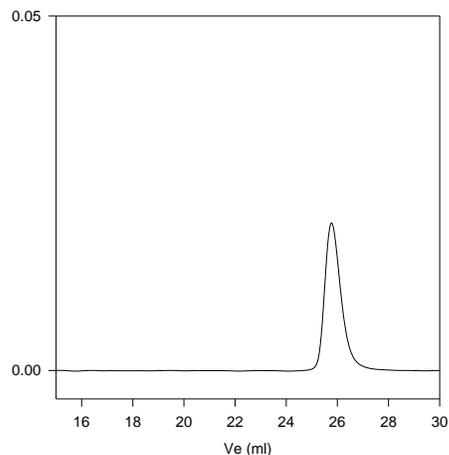


1H-NMR Spectrum of the block copolymer:



SEC profile of the PEG Sample:

P43935-EGOCH3Br



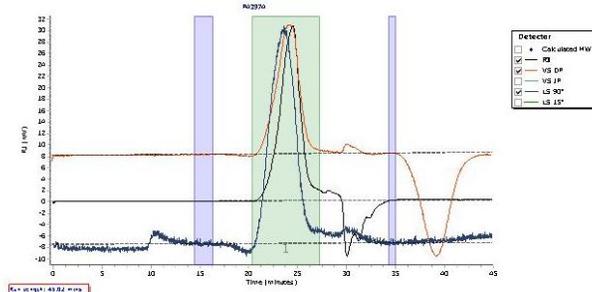
Size exclusion chromatography:

— Bromo terminated Poly(ethylene glycol methyl ether),
M_n=5,000, M_w=5,400, PDI=1.06

SEC of the block copolymer:

P43974

Chromatogram Plot



Molecular Weight Averages							
Peak	Mp (g/mol)	Mn (g/mol)	Mw (g/mol)	Mz (g/mol)	Mz+1 (g/mol)	Mu (g/mol)	PD
Peak 1	10200	9827	15271	23835	35628	20777	1.554