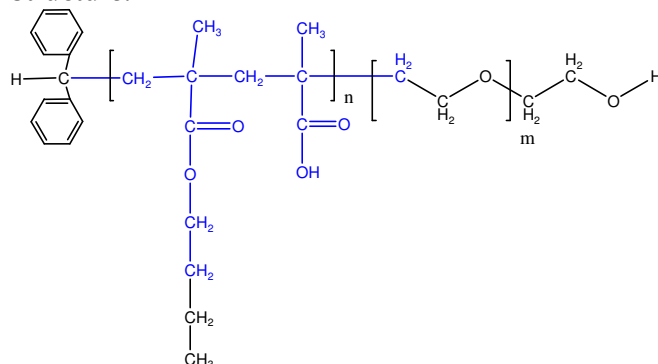


Sample Name: Poly(Methacrylic acid -n butylmethacrylate ran -b-Ethylene oxide)
Sample #: P19054A-MAAnBuMAran-b-EO
Structure:

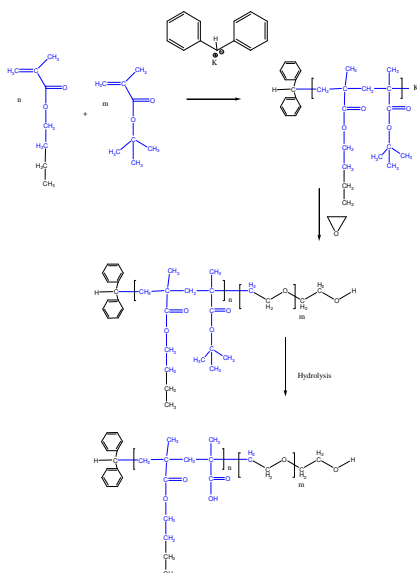


Composition:

Mn $\times 10^3$ MAA-nBuMAran -b-EO	PDI
14.5-b-4.5	1.15

Synthesis Procedure:

This lot by successive addition of mixture of tBuMA-nBuMA (1:1 ratio) followed by addition of EO monomer.



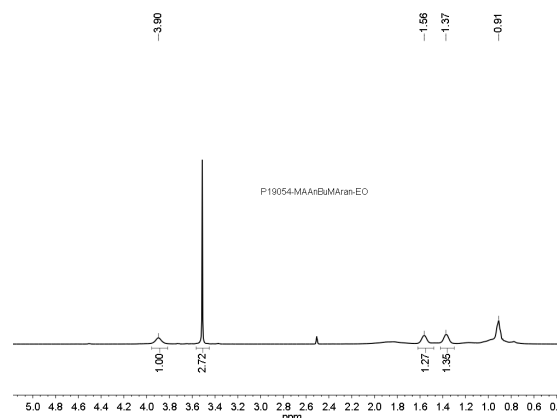
Characterization:

By SEC and HNMR analysis.

References:

J. Wang, **S. K. Varshney**, J. Jerome and Ph. Teyssie "Synthesis of AB (BA) ABA and BAB Block copolymers of tert-butylmethacrylate (A) and ethylene oxide (B) " *CA Vol 117, 16, 151478, J. Polym. Sci., Part-A: Polym. Chem. Ed., 1992, 30, 2251-2261.*

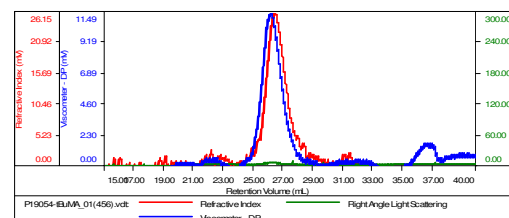
H NMR:



SEC of the block copolymer:

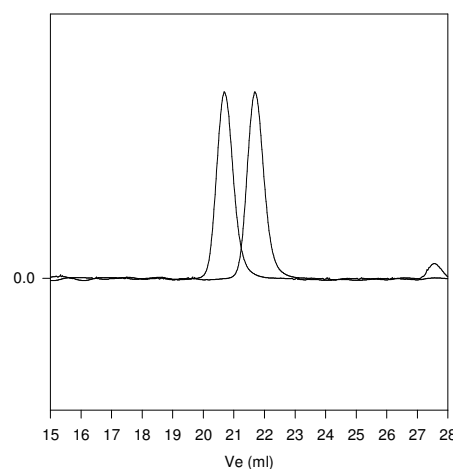
Sample ID: P19054-tBuMA

Concentration (mg/mL)	1.3584
Sample drvdc (mL/g)	0.0550
Method File	PS80K-Jan22-2015-0000.vcm
Column Set	3x PL 1113-6300
Solvent	THF



Sample	MW Number Average (Da)	MW Weight Average (Da)	MW at Peak (Da)	Polydispersity	Intrinsic Viscosity (dL/g)
P19054-tBuMA_01(456).vcl	17,963	20,408	20,501	1.137	0.2706

P19054-tBMAEO



Size exclusion chromatography of poly(t-butyl methacrylate-b-ethyleneoxide)
 — Poly(tBuMA-nBuMA), $M_n=18,000$, $PI=1.13$
 — Block Copolymer PtBuMA-nBuMAran(18,000)-b-PEO(4500 from NMR), $PI=1.15$
 After hydrolysis
 Block Copolymer PMAAnBuMAran(14,500)-b-PEO(4500 from NMR), $PI=1.15$