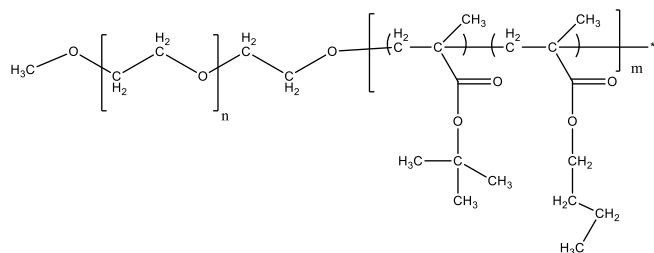


Sample Name: Poly[(tert.butylmethacrylate-n butylmethacrylate ran) –b-ethylene oxide]

Sample #: P19061-EO-tBuMA nBuMAran

Structure:



Composition:

$M_n \times 10^3$ EO-b-tBuMA nBuMAran	PDI
7.0-b-90.0	1.58

tBuMA:nBuMA molar ratio	1:1
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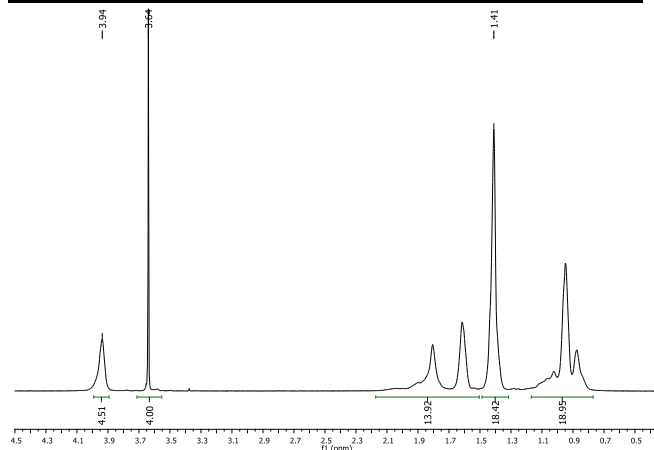
Synthesis Procedure:

The polymer was synthesized by anionic polymerization of a mixture of tBuMA-nBuMA monomers (1:1 ratio) on to PEG macroanions.

Characterization:

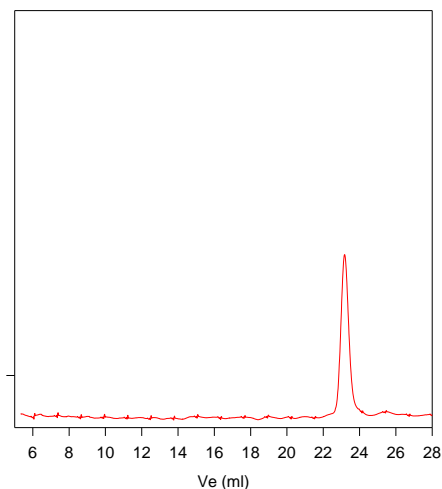
The molecular weight and composition were calculated based on ^1H NMR. The polydispersity was characterized by size exclusion chromatography (SEC) using DMF as eluent.

^1H -NMR Spectrum of the block copolymer in ester



SEC profile of the PEG polymer Sample:

P18802-EGOCH3



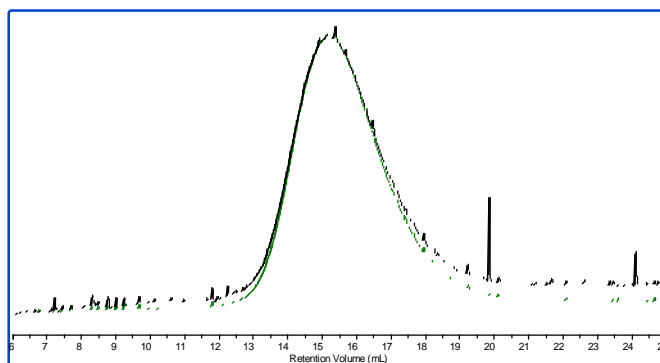
Size exclusion chromatograph of poly(ethylene glycol):

$M_n=7,000$, $M_w=7,300$, PDI=1.05

SEC elugram of the block copolymer:

P19061

dn/dc	0.0450
Flow Rate	0.7000
Solvent	DMF with LiBr
Method	PSS column-PMMA60K-Jan3-2019-0002.vcm



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.