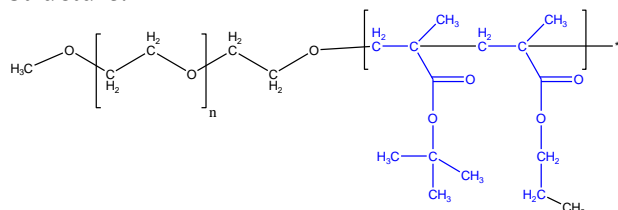


**Sample Name:** Poly(tert.butylmethacrylate-n butylmethacrylate ran –b-Ethylene oxide)

**Sample #:** P19059-EO-tBuMAAnBuMAran

**Structure:**



**Composition:**

$M_n \times 10^3$	PDI
EO-b-PtBuMAAnBuMAran	
7.5-b-27.0	1.20
tBuMA:nBuMA 1:1 ratio	

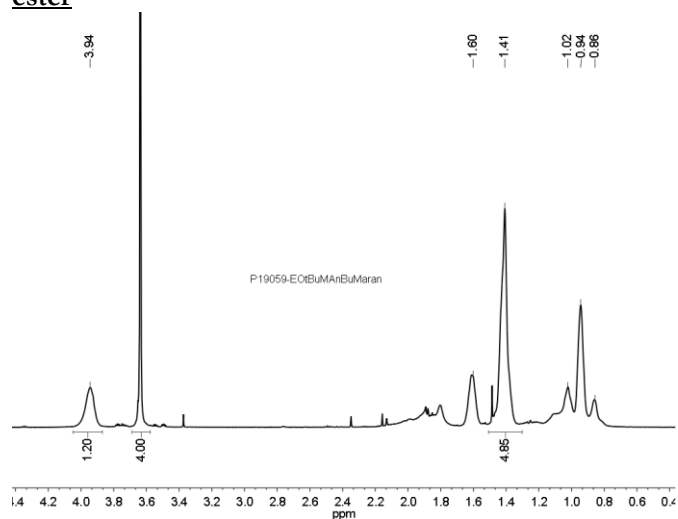
**Synthesis Procedure:**

This lot by successive addition of mixture of tBuMA-nBuMA monomers (1:1 ratio) on to PEO macroanions.

**Characterization:**

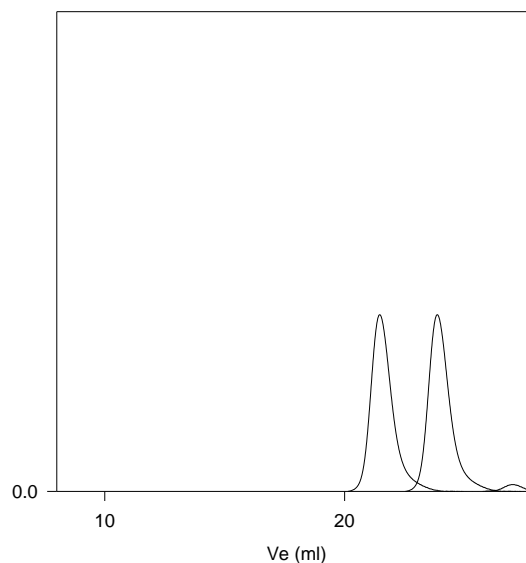
By SEC and HNMR analysis.

**<sup>1</sup>H-NMR Spectrum of the block copolymer in ester**



**SEC of the block copolymer:**

**P19059-EO-tBuMAAnBuMAran**



Size exclusion chromatography of poly(ethylene oxide-t-butyl methacrylate)

— Poly(ethylene oxide),  $M_n=7500$ ,  $M_w=8250$ ,  $PI=1.10$

— Block Copolymer PEO(7500)-b-PtBuMAAnBuMAran (27000),  $PI=1.10$

Composition from H NMR

after Hydrolysis of tert. butyl ester:

Mn: PEO-b-MAAnBuMA: 7500-b-22,000

**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.*