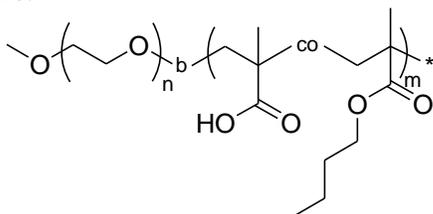


**Sample Name:** Poly(EO-b-Methacrylic acid -n butylmethacrylate ran

**Sample #:** P19059A-EO-MAAnBuMAran

**Structure:**

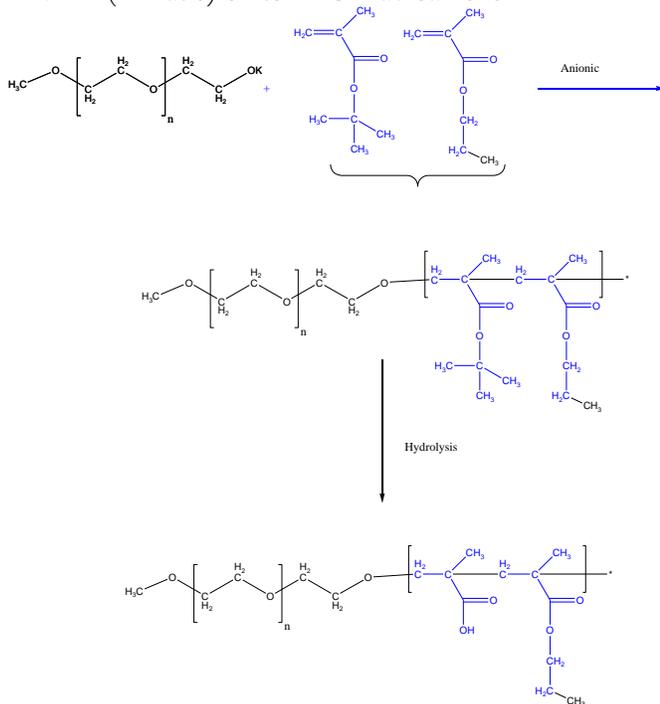


**Composition:**

Mn × 10 <sup>3</sup> EO-b-MAAnBUMAran	PDI
7.5-b-22.0	1.2
MAA:nBUMA	1:1 ratio

**Synthesis Procedure:**

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



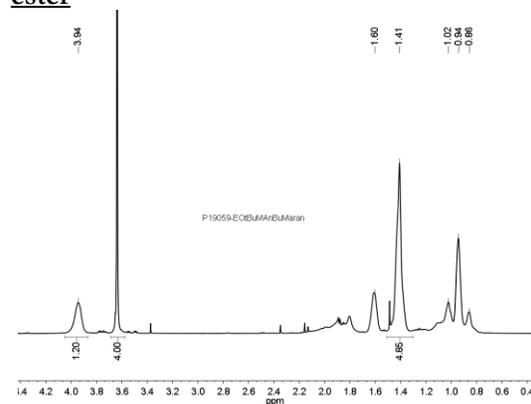
**Characterization:**

BY SEC and HNMR analysis.

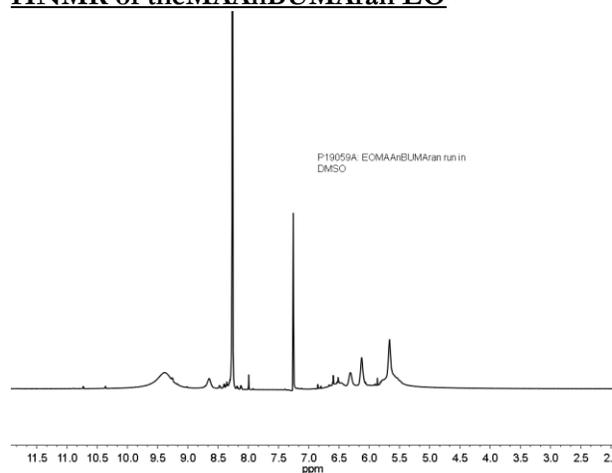
**References:**

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.*

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

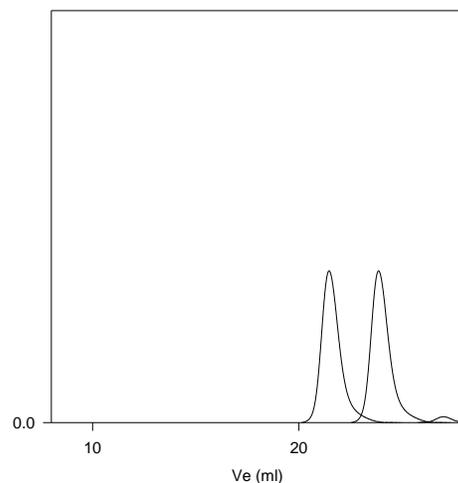


**HNMR of theMAAnBUMAran EO**



**SEC of the block copolymer:**

**P19059-EO-tBuMAAnBuMAran**



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

— Poly(ethylene oxide), M<sub>n</sub>=7500, M<sub>w</sub>=8250, PI=1.10

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

Composition from H NMR

after Hydrolysis of tert. butyl ester:

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