

Sample Name:

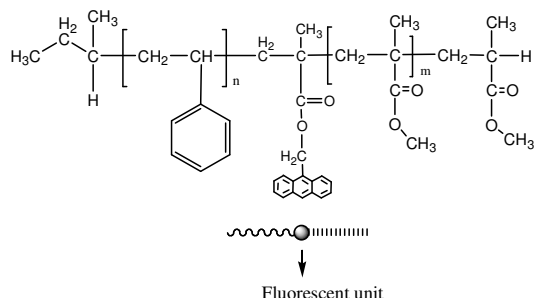
Poly(styrene-b(9-Anthryl methyl methacrylate-methyl methacrylate)

(polymethylmethacrylate rich in syndiotactic contents > 78%)

(Unit of 9-anthryl methyl methacrylate at the junction of the PSMMA block)

Sample #: **P19657A-SMMAAnMMA**

Structure:

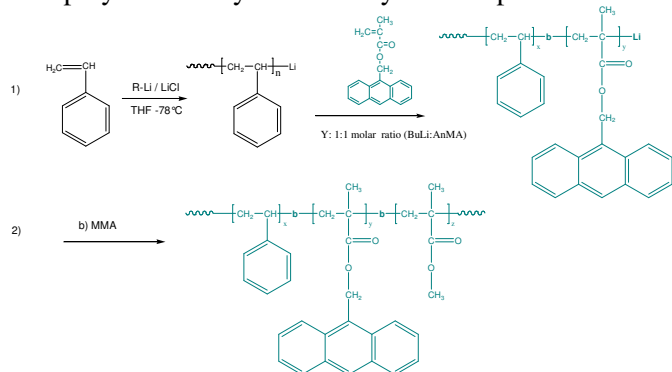


Composition:

Mn x 10 ³	PDI
S-b-AnMMA--MMA	
46.5-b-(AnMMA)-b-50.0	1.19

Synthesis Procedure:

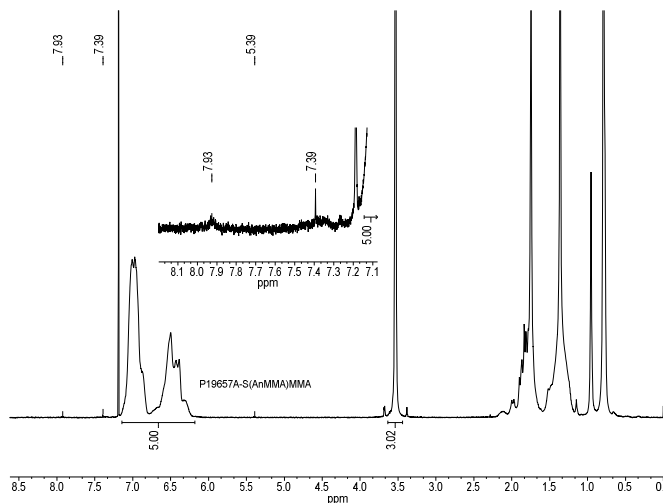
The polymer was synthesized by anionic process



Characterization:

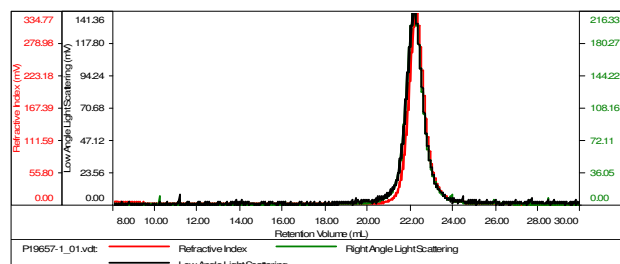
The polymer was characterized by SEC and ¹H NMR.

¹H NMR spectrum of the polymer:



SEC elugram of the first (styrene) block:

Sample ID-P19657-1	
Concentration (mg/mL)	1.6444
Sample dn/dc (mL/g)	0.1850
Method File	PS80K_June30_2015-0000.vom
Column Set	3x PL 1113-6300
Solvent	THF

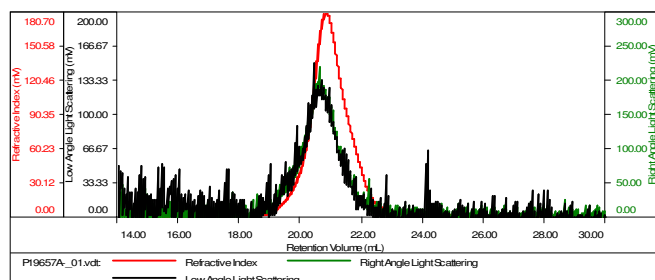


Sample	MW Number Average (Da)	MW Weight Average (Da)	MW at Peak (Da)	Polydispersity	Intrinsic Viscosity (dL/g)
P19657-1_01.vcl	46,489	47,633	44,021	1.034	1.1656

SEC elugram of the polymer:

Sample ID-P19657A-S(An)MMA

Concentration (mg/mL)	1.9913
Sample dn/dc (mL/g)	0.1350
Method File	PS80K-Jan-2016-0000.vcm
Column Set	3x PL 1113-6300
Solvent	THF



Sample	Mn	Mw	Mw/Mn	Mz	IV
P19657A_01.vct	96,353	114,850	1.192	149,764	1.9474

References for further information:

1. S. K. Varshney, R. Fayt, Ph. Teyssie, and J.P. Hautekeer US Patent 5,264,527 (1993)
2. Ph. Teyssie, Ph. Bayard, R. Jerome, S. K. Varshney, and J. S. Wang, *35th IUPAC International Union of Pure & Applied Chemistry International Symposium on Macromolecules* 1994, 67.
3. Ph. Teyssie, R. Fayt, J. P. Hautekeer, C. Jacobs, R. Jerome, L. Leemans and S. K. Varshney *Makromolekular Chemie, Macromol. Symp.*, 1990, 32,61-73.
4. S. K. Varshney, J. P. Hautekeer, R. Fayt, R. Jerome, and Ph.Teyssie *Macromolecules*, 1990, 23, 2618-2622.
5. R. Jerome, R. Forte, S. K. Varshney, R. Fayt, and Ph. Teyssie
"The Anionic Polymerization of Alkylacrylates:A Challenge" in the Recent Advances in Mechanistic and Synthetic Aspects of Polymerization: M. Fontanaille and A. Guyot Ed., NATO ASI Series C 215,101 (1987), CA Vol. 108, 12, 094992.