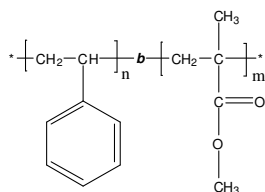


Sample Name: **Poly (styrene-*b*-methyl methacrylate)**
(PMMA block is predominantly syndiotactic, >78%)

Sample # **P19609-SMMA**

Structure:



Composition:

Mn x 10 ³ S-b-MMA	PDI
5.5-b-4.0	1.2

T _g for PS block:	103°C
T _g for PMMA block:	103°C

Synthesis procedure:

The polymer was synthesized by anionic polymerization.

Characterization:

The polymer was characterized by SEC, ¹H NMR, and DSC.

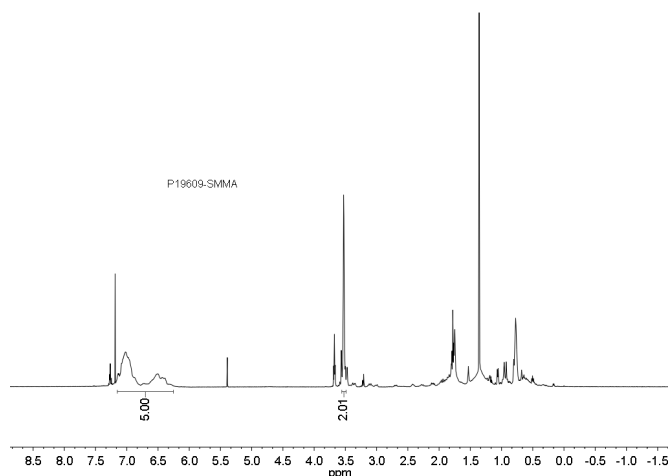
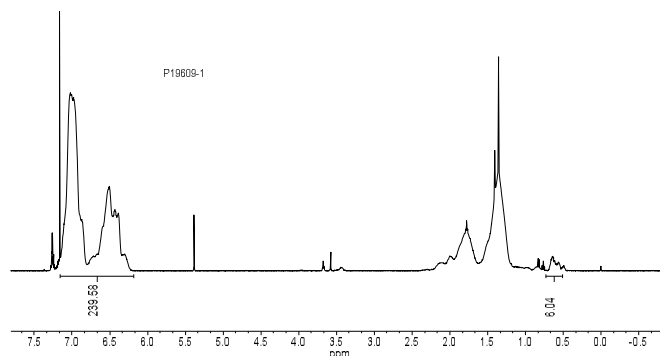
Solubility:

Poly(styrene-*b*-methyl methacrylate) is soluble in THF, toluene, dioxane, chloroform; and it precipitates from methanol, ethanol, hexanes, water.

References:

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.

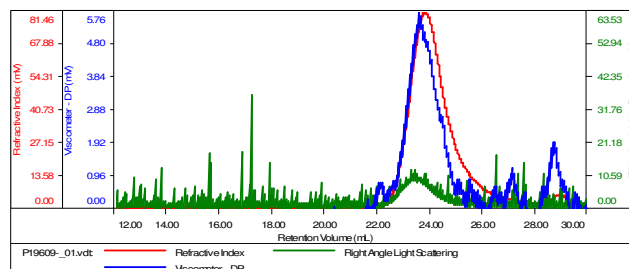
¹H NMR spectrum of the polymer:



SEC elugram:

Sample ID-P19609-2

Concentration (mg/mL)	0.4124
Sample dn/dc (mL/g)	0.1300
Method File	PS80K-Nov-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)
P19609_01.vcl	9,475	11,417	10,184	1.205	0.5042