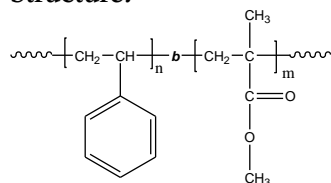


Sample Name: Poly (styrene-b-methyl methacrylate) (*polymethylmethacrylate rich in syndiotactic contents > 78%*)

Sample #: P19364-SMMA

Structure:



Composition:

Mn x 10 ³ S-b-MMA	PDI
518.0-b-538.0	1.16
T _g for PS block: 107°C	T _g for PS block: 133°C

Synthesis Procedure:

By anionic polymerization

Characterization:

BY SEC and HNMR

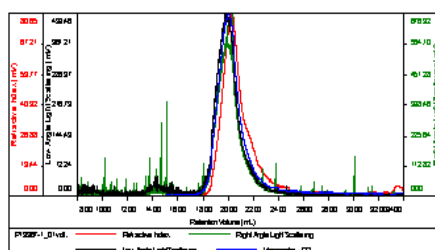
Solubility:

Poly (styrene-b-methyl methacrylate) is soluble in THF, toluene, dioxane and CHCl₃. This polymer readily precipitates from methanol, ethanol, hexanes and water.

SEC of Polymer:

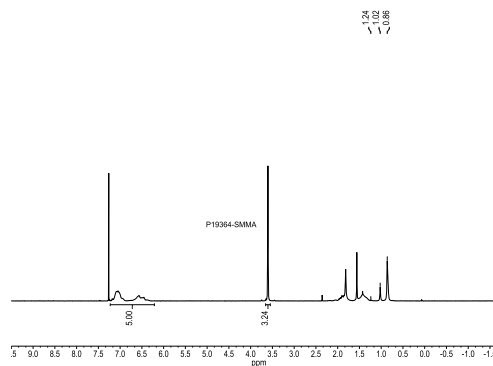
Sample ID:P19364-S

Concentration (mg/mL)	0.7439
Sample elute (mL/g)	0.1860
Method File	PS80K-June30-2015-0000.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)
P19364-S	518.0	538.0	525.0	1.03	0.24

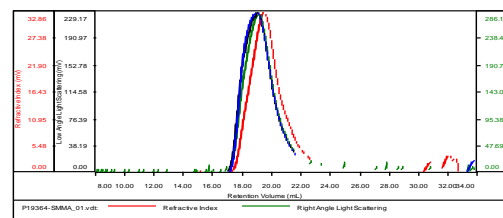
¹H-NMR Spectrum of the Polymer:



SEC of Sample :

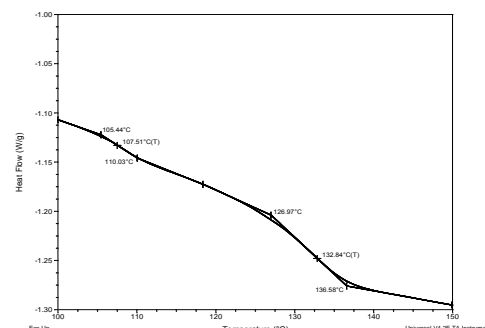
Sample ID:P19364-SMMA

Concentration (mg/mL)	0.6027
Sample elute (mL/g)	0.1220
Method File	PS80K-June30-2015-0000.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)
P19364-SMMA_01.vdt	1.028 e 6	1.194 e 6	1.053 e 6	1.161	8.9099

Thermogram of the sample



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.