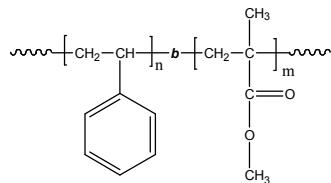


Sample Name: Poly (styrene-b-methyl methacrylate) (*polymethylmethacrylate rich in syndiotactic contents > 78%*)

Sample #: P19363-SMMA

Structure:



Composition:

| | |
|------------------------------------|--------------------------------------|
| Mn x 10 ³ S-b-MMA | PDI |
| 1,722.0-b-75.0 | 1.05 |
| T _g for PS block: 107°C | T _g for PMMA block: 133°C |

Synthesis Procedure:

By anionic polymerization

Characterization:

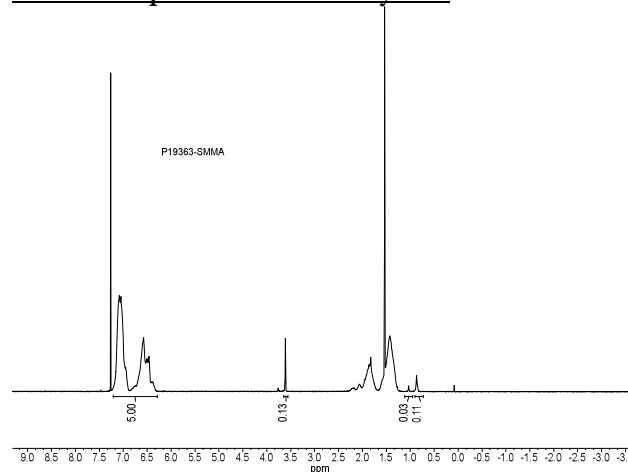
BY SEC and HNMR

Thermal analysis of the samples was carried out using a differential scanning calorimeter (TA Q100) at a heating rate of 15°C/min. The inflection glass transition temperature (T_g) of the sample has been considered.

Solubility:

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

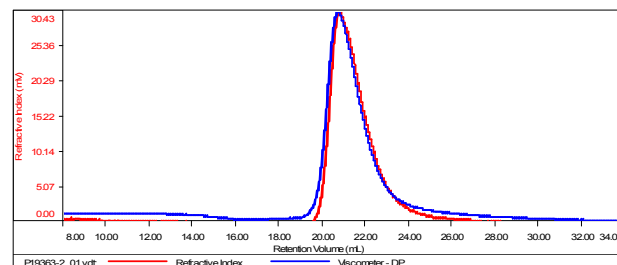
¹H-NMR Spectrum of the Polymer:



SEC of Sample:

Sample ID: P19363-SMMA

| | |
|-----------------------|----------------------------|
| Concentration (mg/mL) | 0.2866 |
| Sample drydc (mL/g) | 0.1850 |
| 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) |
|-----------------|------------------------|------------------------|-----------------|----------------|----------------------------|
| P19363-2_01.vcl | 1.805 e 6 | 1.894 e 6 | 1.910 e 6 | 1.049 | 20.5180 |

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. and A. Guyot Ed., NATO ASI Series C 215,101 (1987), CA Vol. 108, 12, 094992.