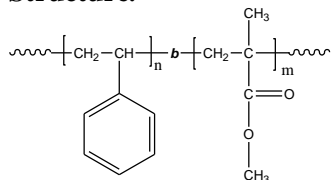


Sample Name: Poly (styrene-*b*-methyl methacrylate) (*polymethylmethacrylate rich in syndiotactic contents > 78%*)

Sample #: P19441P-SMMA

Structure:



Composition:

Mn x 10 ³ S-b-MMA	PDI
128.0-b-512.0	1.24

Synthesis Procedure:

The polymer was synthesized by anionic polymerization process.

Characterization:

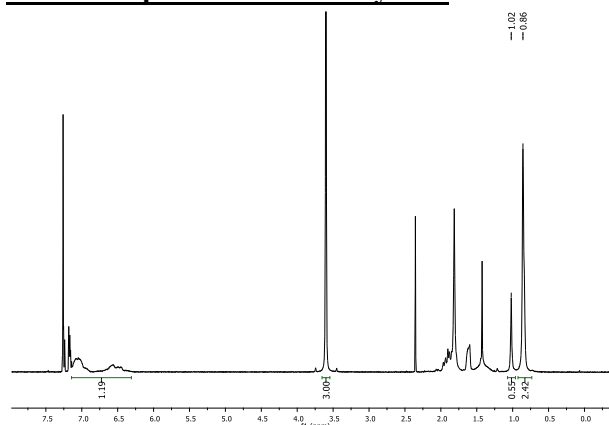
The product was characterized by size exclusion chromatography (SEC) and ¹H NMR.

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.

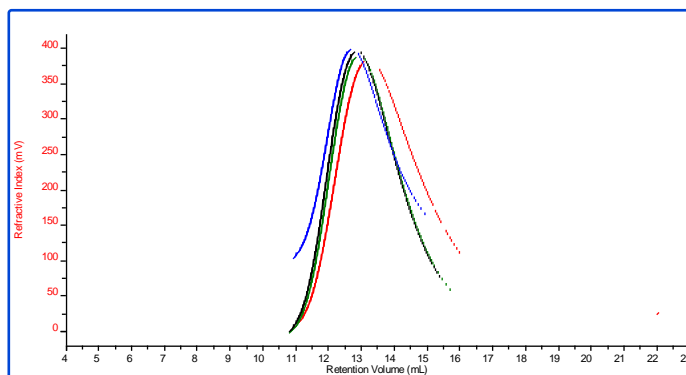
¹H-NMR Spectrum of the Polymer:



SEC elugram of the Sample:

P19441P

dn/dc	0.0850
Flow Rate	0.7000
Solvent	DMF with LiBr
Method	PSS column-PMMA60K-Jan3-2019-0002.vcm



Sample	Mn	Mw	Mz	IV	Mw/Mn
P19441P_1_20	640,101	791,023	954,078	1.3053	1.236

References for further information:

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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.
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