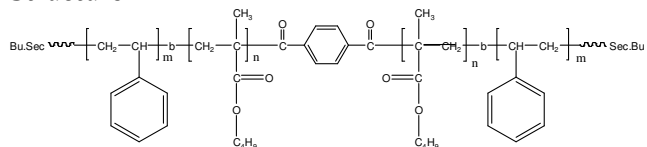


Sample Name: Poly(Styrene-b-methyl methacrylate-b-Styrene)

Sample #: P18602-SMMAS

Structure:

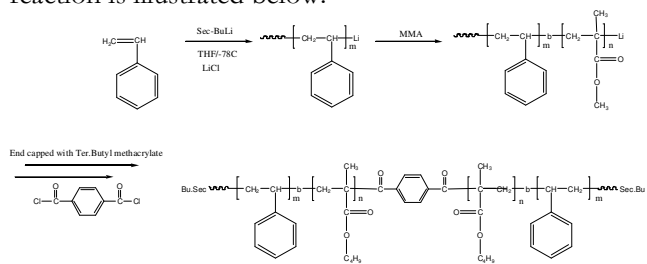


Composition:

Mn × 10³ (S-b-MMA-S)	PDI
4.0-b-11.0-b-4.0	1.10
T_g for MMA block: 113°C	T_g for PS block: Not distinct

Synthesis:

Poly(styrene-b-methylmethacrylate-b-styrene) is prepared by living anionic polymerization. The details are reported in the reference¹. The scheme of the reaction is illustrated below:



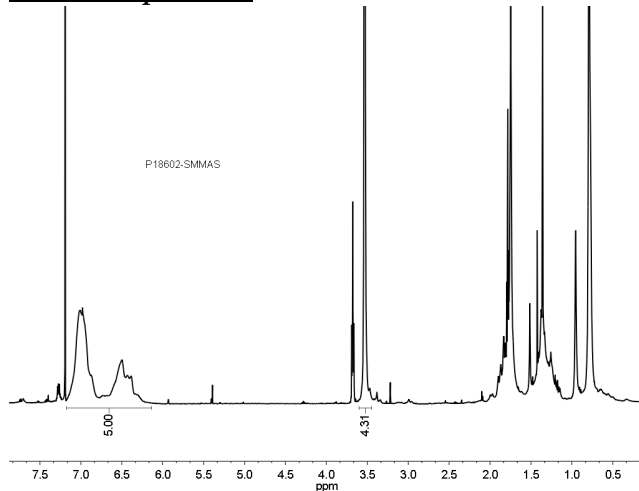
Characterization:

By size exclusion chromatography (SEC) and ¹H NMR spectroscopy.

Thermal analysis:

Thermal analysis of the samples was carried out on a TA Q100 differential scanning calorimeter at a heating rate of 10°C/min. The midpoint of the slope change of the heat flow plot of the second heating scan was considered as the glass transition temperature (T_g).

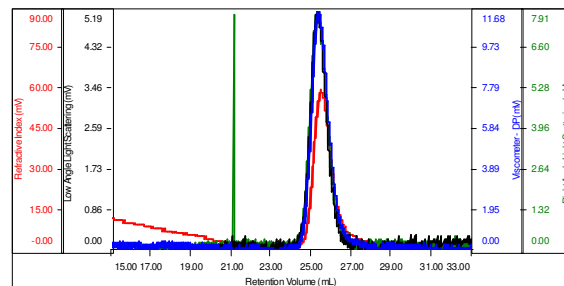
¹H NMR spectrum:



SEC:

Sample ID: P18602-SMMA diblock

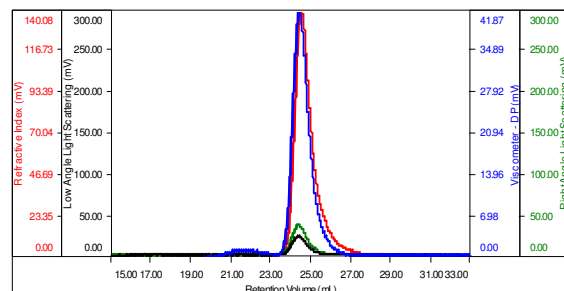
Concentration (mg/mL)	1.1339
Sample dn/dc (mL/g)	0.1370
Method File	PS80K-March13-2014-0000.vcm
Column Set	3x PL 1113-6300
System	System 1



Sample	Mn	Mw	Mp	Mw/Mn	IV
P18602-SMMA_01.vdt	9,337	10,725	11,311	1.149	0.2065

Sample ID: P18602-SMMAS triblock

Concentration (mg/mL)	2.5126
Sample dn/dc (mL/g)	0.1370
Method File	PS80K-March13-2014-0000.vcm
Column Set	3x PL 1113-6300
System	System 1



Sample	Mn	Mw	Mp	Mw/Mn	IV
P18602-3_crd_01.vdt	19,085	21,590	22,351	1.131	0.3162

Reference:

S.K. Varshney, P. Kesani, N. Agarwal, J. Xin. Zhang, and M. Rafailovich. Synthesis of ABA type thermoplastic elastomers based on Polyacrylates, Macromolecules, 1999, 32, 235.