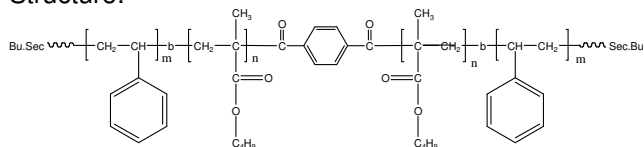


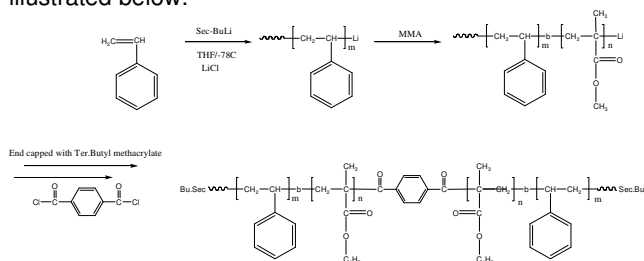
Sample Name:**Poly(Styrene-b-methyl methacrylate-b-Styrene)****Sample #: P19114-SMMAS****Structure:****Composition:**

Mn × 10³ (S-b-MMA-S)	PDI
6.5-b-17.0-b-6.5	1.19

T_g for MMA block: 113°C	T_g for PS block: Not distinct
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Synthesis:

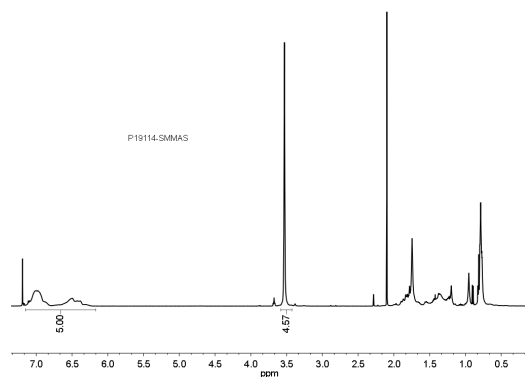
Poly(styrene-b-methylmethacrylate-b-styrene) is prepared by living anionic polymerization. The details are reported in the reference¹. The scheme of the reaction is illustrated below:

**Characterization:**

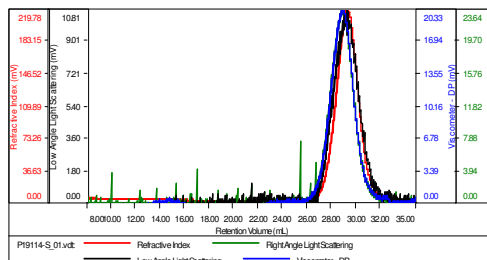
By size exclusion chromatography (SEC) and HNMR spectroscopy.

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).

¹HNMR spectrum:**SEC of Sample:****Sample ID: P19114-S Block**

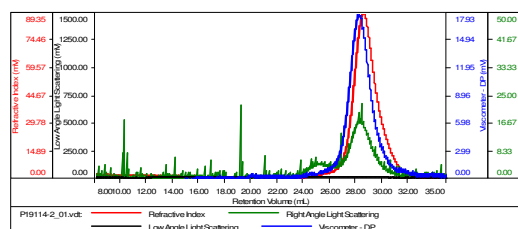
Concentration (mg/mL)	6.9465
Sample divd: (mL/g)	0.1850
Method File	PS80K-Jan22-2015-0003.vcm
Column Set	3x PL 1113-6300
Solvent	THF



Sample	MW Number Average (Da)	MW Weight Average (Da)	MW at Peak (Da)	Polydispersity	Intrinsic Viscosity (dL/g)
P19114-S_01.vdt	6,477	7,564	6,491	1.168	0.1341

Sample ID: P19114-SMMA Before linking

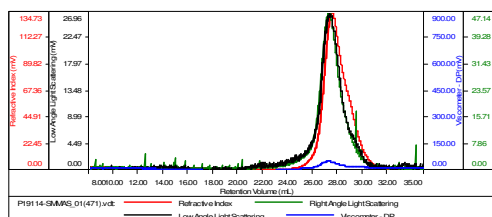
Concentration (mg/mL)	3.6846
Sample divd: (mL/g)	0.1400
Method File	PS80K-Jan22-2015-0003.vcm
Column Set	3x PL 1113-6300
Solvent	THF



Sample	MW Number Average (Da)	MW Weight Average (Da)	MW at Peak (Da)	Polydispersity	Intrinsic Viscosity (dL/g)
P19114-2_01.vdt	15,601	18,127	16,219	1.162	0.2101

Sample ID: P19114-SMMAS

Concentration (mg/mL)	6.5772
Sample divd: (mL/g)	0.1200
Method File	PS80K-Jan22-2015-0003.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)
P19114-SMMAS_01(471).vdt	29,710	35,252	35,275	1.187	0.3123

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.