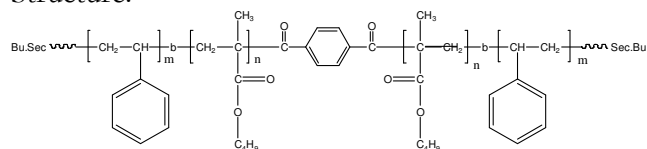


Sample Name: Poly(Styrene-b-methyl methacrylate-b-Styrene)

Sample #: P18603-SMMAS

Structure:



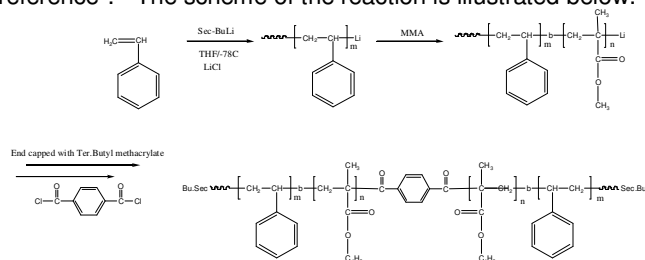
Composition:

Mn × 10 ³ (S-b-MMA-S)	PDI
11.5-b-26.0-b-11.0	1.13

T _g for MMA block: 113°C	T _g for PS block: Not distinct
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Synthesis Procedure:

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:



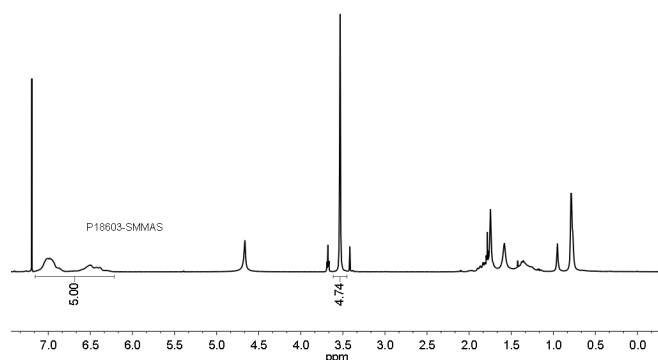
Characterization:

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).

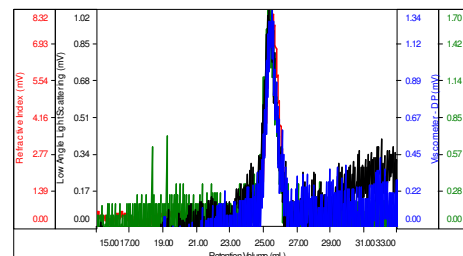
¹H NMR spectrum:



SEC:

Sample ID: P18603-S

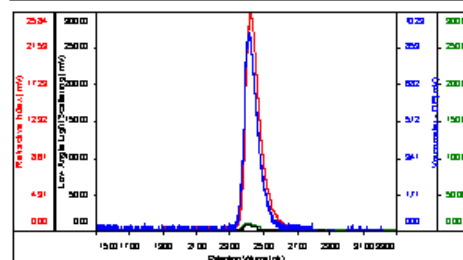
Concentration (mg/mL)	0.0996
Sample dilute (mL/g)	0.1850
Method File	PS80K-March13-2014-0000.vcm
Column Set	3x PL 1113-6300
System	System 1



Sample	Mn	Mw	Mp	Mw/Mn	IV
P18603-1_01.vct	11,760	12,423	11,153	1.056	1.0000

Sample ID: P18603-SMMA

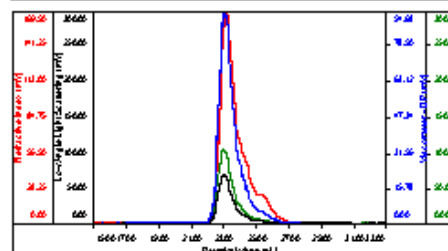
Concentration (mg/mL)	0.4560
Sample dilute (mL/g)	0.1370
Method File	PS80K-March13-2014-0000.vcm
Column Set	3x PL 1113-6300
System	System 1



Sample	Mn	Mw	Mp	Mw/Mn	IV
P18603-2_01.vct	25,239	28,161	29,015	1.116	0.3912

**Sample ID:
P18603-SMMAS ord**

Concentration (mg/mL)	3.6553
Sample dilute (mL/g)	0.1260
Method File	PS80K-March13-2014-0000.vcm
Column Set	3x PL 1113-6300
System	System 1



Sample	Mn	Mw	Mp	Mw/Mn	IV
P18603-1_01.vct	45,353	52,160	53,537	1.137	0.6546

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.