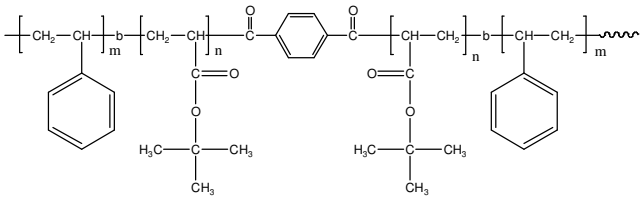
Sample Name:
Poly(Styrene-b-tert butyl acrylate-b-Styrene)

Sample #: **P19590A-StBuAS**

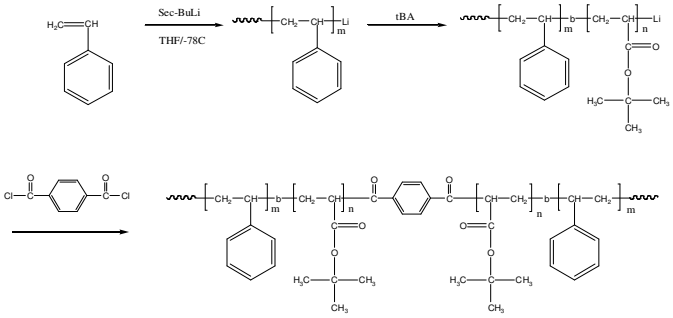
Structure:



Composition:

Mn x 10^3 (S-b-tBuA-S)	PDI
1.0-b-34.0-b-1.0	1.23

Synthesis Procedure:
The scheme of the reaction is illustrated below:



Characterization:
The molecular weight and polydispersity index of this polymer were determined by size exclusion chromatography (SEC) using a Varian liquid chromatograph equipped with a UV and refractive index detector.

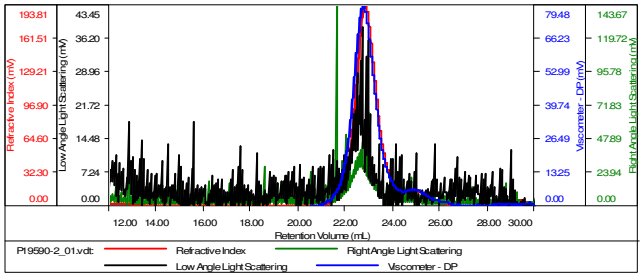
Solubility:
Polymer is soluble in THF, toluene and $CHCl_3$. It precipitates from methanol, ethanol, water and hexanes (depending on the compositions).

Reference:
1. 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.

SES elugram

Sample ID-P19590-2

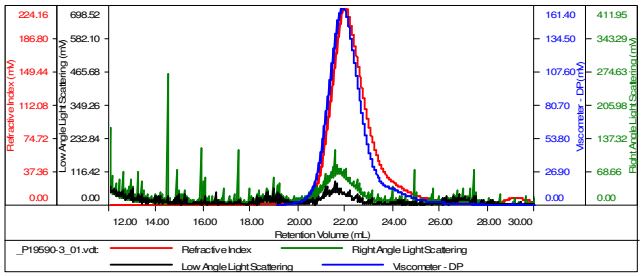
Concentration (mg/mL)	0.8786
Sample dn/dc (mL/g)	0.0980
Method File	PS80K-Nov-2015-0000.vcm
Column Set	3x PL 1113-6300
Solvent	THF



Sample	MW Number Average (Da)	MW Weight Average (Da)	MW at Peak (Da)	Polydispersity	Intrinsic Viscosity (dL/g)
P19590-2_01.vdt	19,603	26,515	17,493	1.353	3.2273

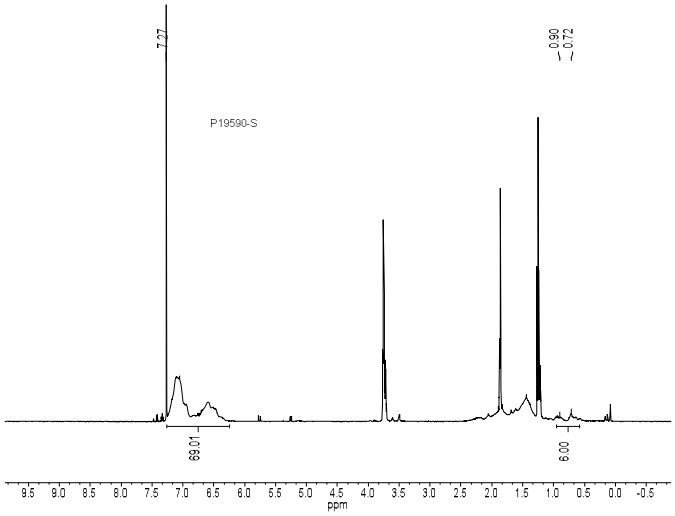
Sample ID-P19590-3

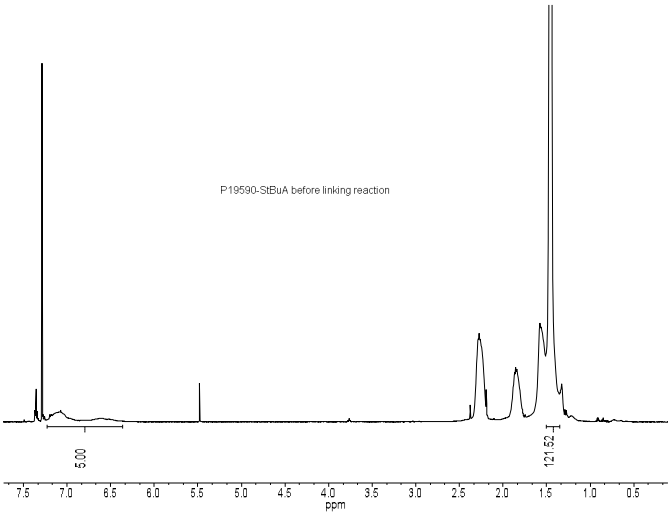
Concentration (mg/mL)	1.6138
Sample dn/dc (mL/g)	0.0900
Method File	PS80K-Nov-2015-0000.vcm
Column Set	3x PL 1113-6300
Solvent	THF



Sample	MW Number Average (Da)	MW Weight Average (Da)	MW at Peak (Da)	Polydispersity	Intrinsic Viscosity (dL/g)
_P19590-3_01.vdt	35,976	44,260	39,782	1.230	4.4646

^{1}H NMR


7.27
0.90
0.72
P19590-S
69.01
6.00
ppm


P19590-StBuA before linking reaction
5.00
121.52
ppm