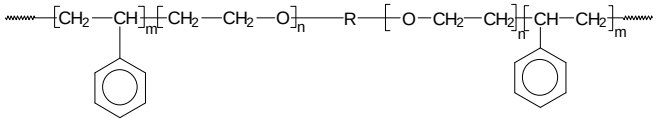
Sample Name: **Poly(Styrene–b–Ethylene Oxide–b–Styrene)**

Sample # **P18915-SEOS**

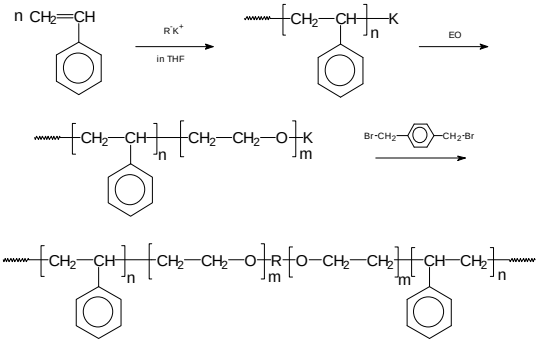
Structure:



Composition:

Mn x 10^3 S-b-EO-b-S	PDI
9.0–b–54.0–b–9.0	1.20

Synthetic Procedure:
Detailed synthesis is reported in ref.1.



Purification of the polymer:
To remove the unlinked fraction of the PS-PEO diblock copolymer, the product was passed through Silica column using various solvents as an eluent.

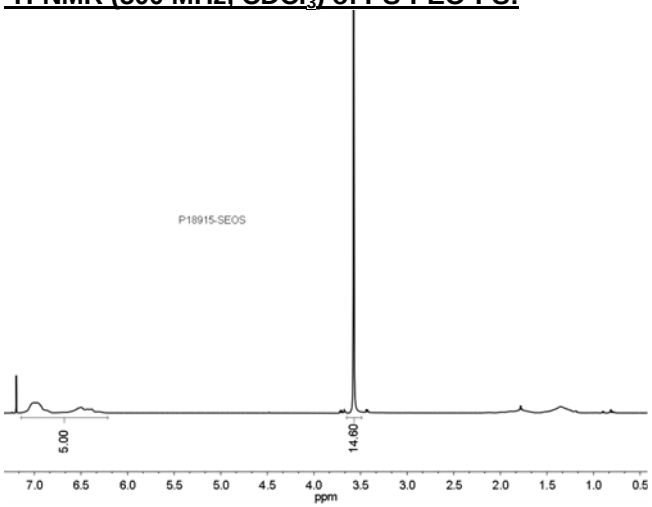
Characterization:
The polymer was analyzed by size exclusion chromatography (SEC) and proton NMR spectroscopy.

Solubility:
The polymer is soluble in THF, toluene, chloroform.

References:

1. S. K. Varshney, Xing Fu. Zhong, P. Kesani, N. Varshney; "Architecturally control polymers from Academia to the Industry"; ACS-Symposium, Orlando, August, 1996.

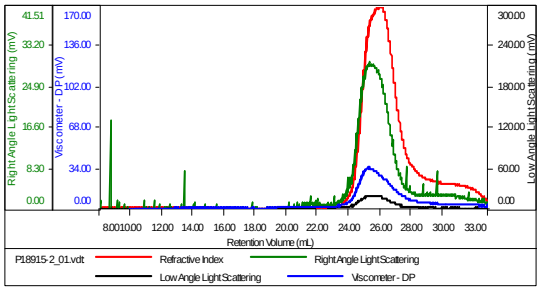
^{1}H-NMR (500 MHz, $CDCl_3$) of PS-PEO-PS:



SEC elugrams of PS-PEO and PS-PEO-PS:

Sample ID: P18915-SEO Before linking

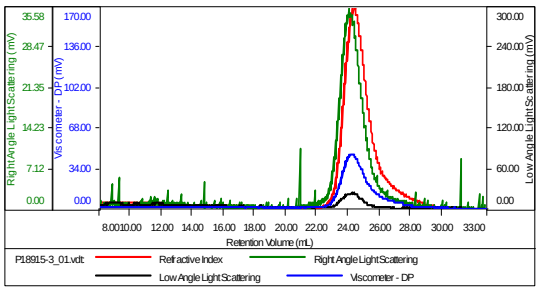
Concentration (mg/mL)	9.4583
Sample dn/dc (mL/g)	0.1450
Method File	PS80K-NOV-2014-0003.vcm
Column Set	3x PL 1113-6300
Solvent	THF



Sample	MW Number Average (Da)	MW Weight Average (Da)	MW at Peak (Da)	Polydispersi	Intrinsic Viscosity (dL/g)
P18915-2_01.vdt	36,363	40,832	40,579	1.123	0.2398

Sample ID: P18915-SEOS

Concentration (mg/mL)	5.0479
Sample dn/dc (mL/g)	0.1300
Method File	PS80K-NOV-2014-0003.vcm
Column Set	3x PL 1113-6300
Solvent	THF



Sample	MW Number Average (Da)	MW Weight Average (Da)	MW at Peak (Da)	Polydispersi	Intrinsic Viscosity (dL/g)
P18915-3_01.vdt	67,683	81,782	81,115	1.208	0.4744