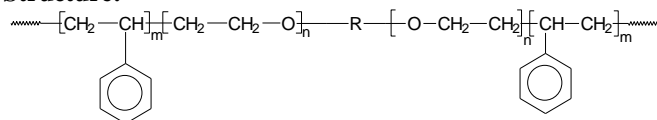


Sample Name: Poly (Styrene-*b*-Ethylene Oxide-*b*-Styrene)

Sample #: P41357-SEOS

Structure:

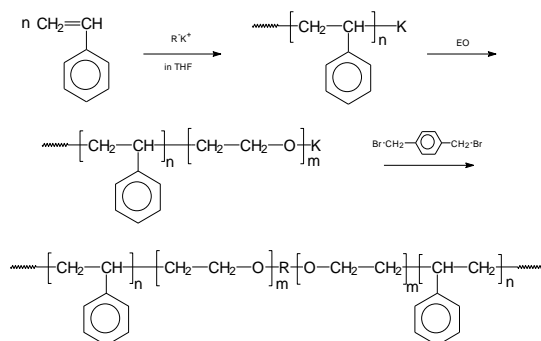


Composition:

Mn x 10 ³ S-b-EO-b-S	PDI
10.0-b-180.0-b-10.0	1.10

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.

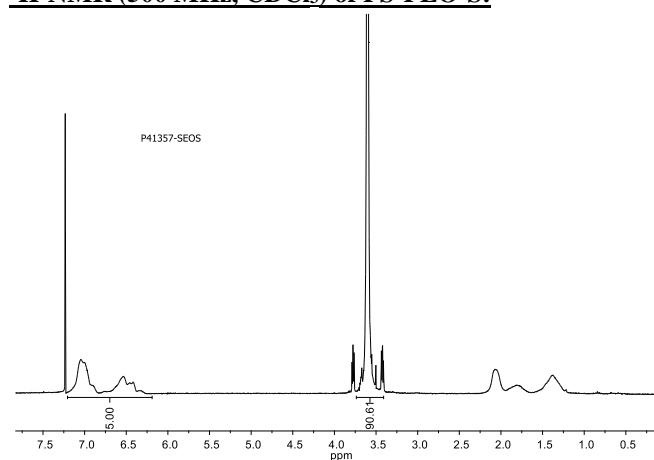
Solubility:

The polymer is soluble in THF, toluene, chloroform.

References:

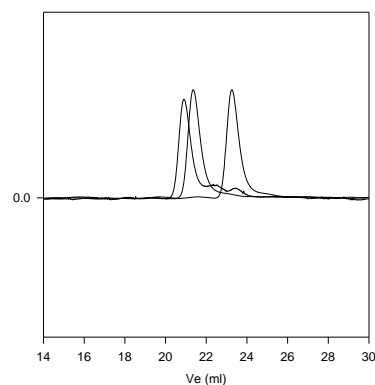
1. S. K. Varshney, Xing Fu. Zhong, P. Kesani, N. Varshney; "Architecturally control polymers from Academia to the Industry"; ACS-Symposium, Orlando, August, 1996.

¹H-NMR (500 MHz, CDCl₃) of PS-PEO-S:



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

P41357-SEOS



Size Exclusion Chromatogram of Poly(butadiene-*b*-ethylene oxide)
 — PS: M_n=10,000 M_w/M_n=1.08
 — PS-*b*-EO: M_n=10,000-*b*-95,000 M_w/M_n=1.08
 — PS-*b*-EO-*b*-S: M_n PS(10,000)-PEO(180,000)-*b*-PS(10,000) M_w/M_n=1.10
 The Mn of PEO is calculated from NMR results,