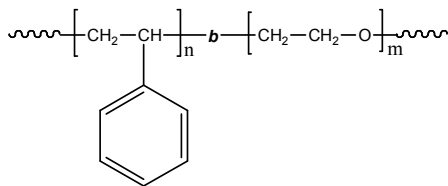


Sample Name: Poly (styrene-b-ethylene oxide)

Sample #: P40298-SEO

Structure:



Composition:

$M_n \times 10^3$ S-b-EO	PDI
5.0-b-2.5	1.02

Synthesis Procedure:

Poly (styrene-b-ethylene oxide) diblock copolymer is prepared by living anionic polymerization.

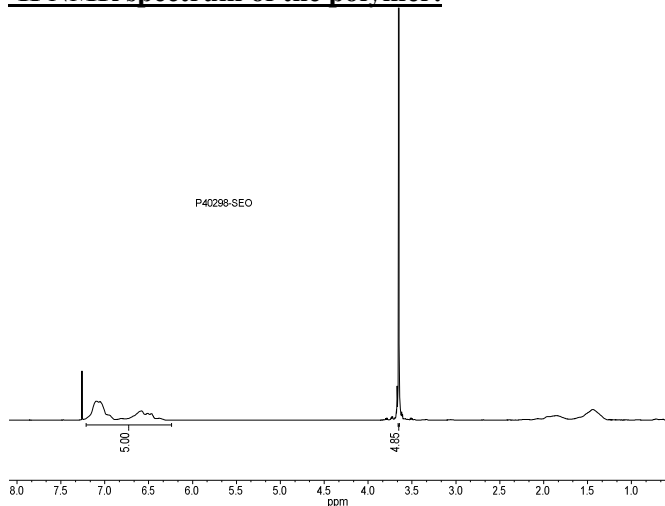
Characterization:

The product was characterized by size exclusion chromatography (SEC) and ^1H NMR.

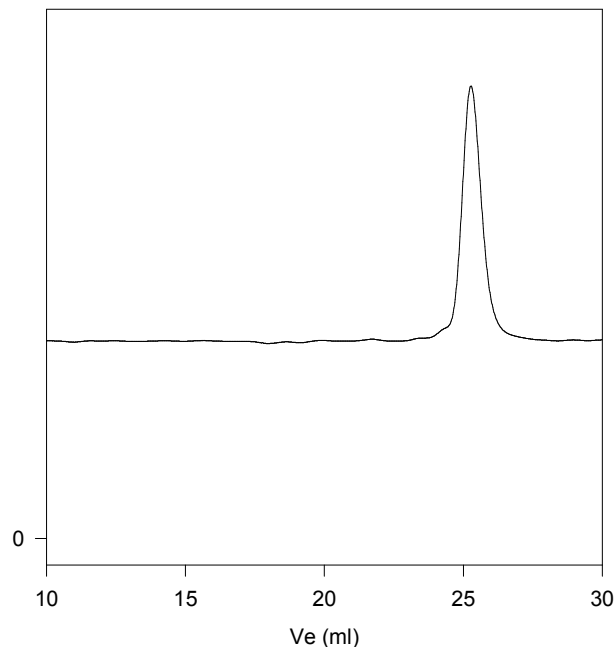
Solubility:

The polymer is soluble in THF (at 35 °C), CHCl_3 , benzene, toluene, and dioxane. Low molecular weight SEO with high contents of the polyethylene oxide block can also be solubilized in methanol and water.

^1H NMR spectrum of the polymer:



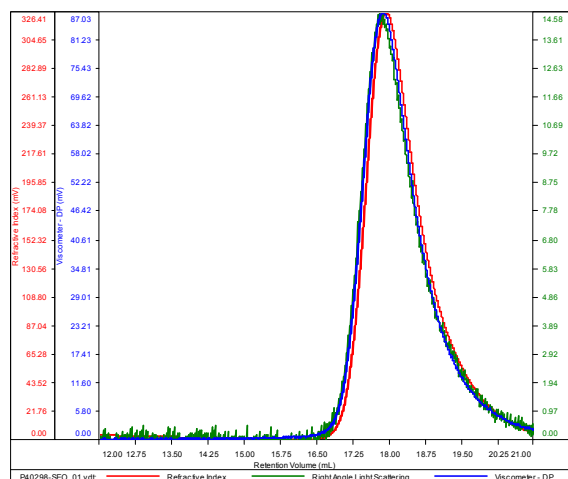
SEC of the SOH used in the synthesis



Size Exclusion chromatography of Hydroxy end poly styrene
—— Polystyrene, $M_n=5,500$, $M_w=6,000$ PI=1.09

SEC elugram of the block copolymer:
P40298-SEO

Conc (mg/mL)	21.6216
dn/dc (mL/g)	0.1300
Method	PS80k_December-2016-0004.vcm
Solvent	DMF w 0.023MLIBr
Column	PSS



Sample	M_n	M_w	M_p	M_w/M_n	IV
P40298-SEO_01.vdt	7,391	7,564	7,298	1.024	0.0625