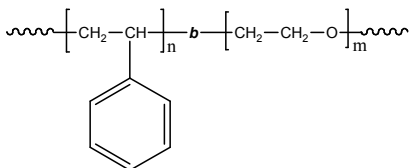


Sample Name: Poly (styrene-b-ethylene oxide)

Sample #: P19461-SEO

Structure:



Composition:

Mn x 10 ³	PDI
53.0-b-15.0	1.07

Synthesis procedure:

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

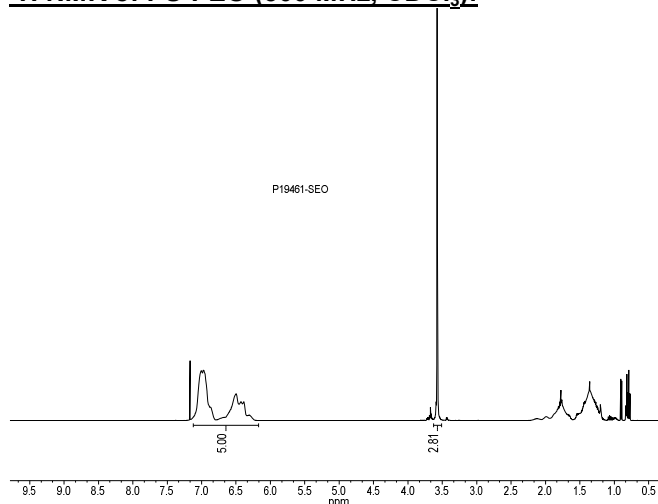
Characterization:

By size exclusion chromatography (SEC) and by ¹H-NMR.

Solubility:

The polymer is soluble in THF (at 35 °C), CHCl₃, benzene, toluene, dioxane. Low molecular weight SEO with high contents of the polyethylene oxide block can also be solubilized in methanol and water.

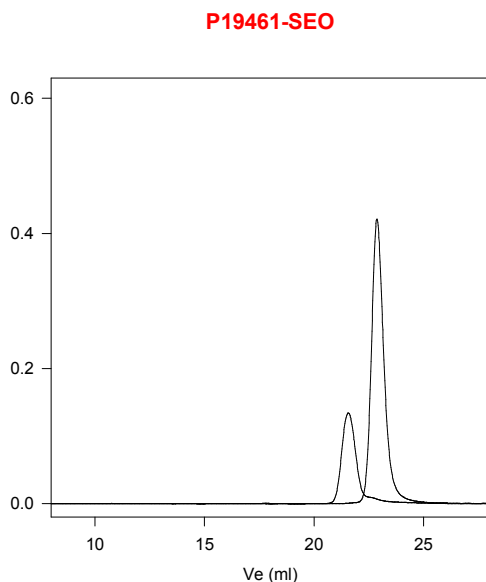
¹H NMR of PS-PEO (500 MHz, CDCl₃):



SEC elugrams of PS and PS-PEO:

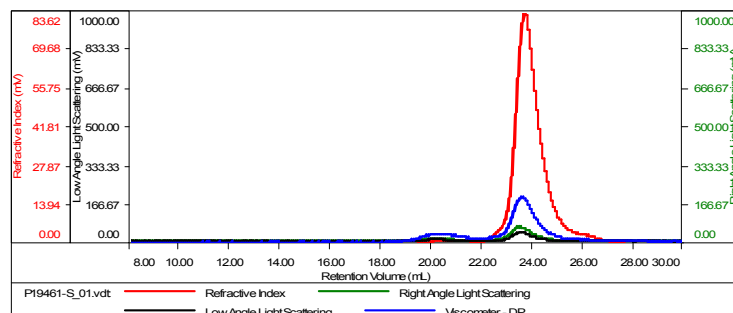
Sample ID:P19461-S

Concentration (mg/mL)	0.4822
Sample dn/dc (mL/g)	0.1850
Method File	PS80K-June30-2015-0000.vcm
Column Set	3x PL 1113-6300
Solvent	THF



Size Exclusion Chromatography:

- Polystyrene, M_n=53,000, M_w=56,400, PI=1.07
- Block Copolymer Polystyrene-b-Poly(ethylene oxide)
Mw: PS(53,000)-b-PEO(15,000), PI=1.07



Sample	MW Number Average (Da)	MW Weight Average (Da)	MW at Peak (Da)	Polydispersity	Intrinsic Viscosity (dL/g)
P19461-S_01.vdt	53,391	60,269	50,071	1.129	1.6115