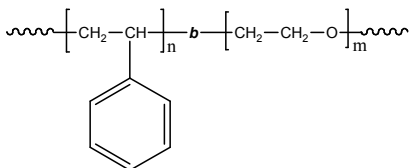


Sample Name: Poly (styrene-b-ethylene oxide)

Sample #: P19464-SEO

Structure:



Composition:

Mn x 10 ³	PDI
49.0-b-31.0	1.07

Synthesis procedure:

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

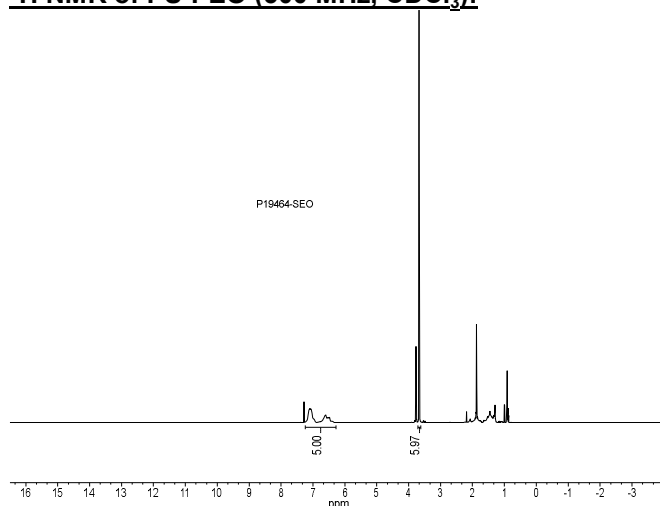
Characterization:

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.

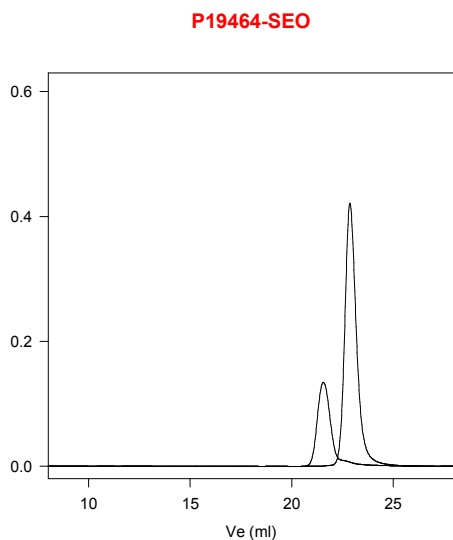
¹H NMR of PS-PEO (500 MHz, CDCl₃):



SEC elugrams of PS and PS-PEO:

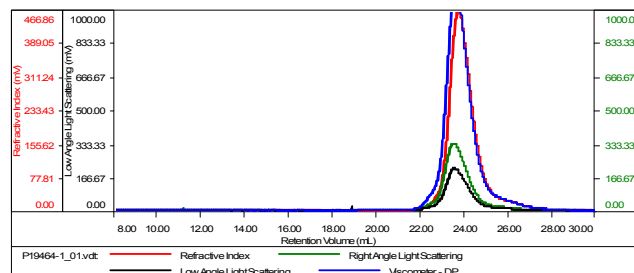
Sample ID: P19464-S

Concentration (mg/mL)	3.1349
Sample ch/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=49,000, M_w=52,400, PI=1.07
- Block Copolymer Polystyrene-b-Poly(ethylene oxide)
Mw: PS(49,000)-b-PEO(31,000), PI=1.07



Sample	MW Number Average (Da)	MW Weight Average (Da)	MW at Peak (Da)	Polydispersity	Intrinsic Viscosity (dL/g)
P19464-1_01.vdt	48,882	52,377	48,155	1.072	1.4883