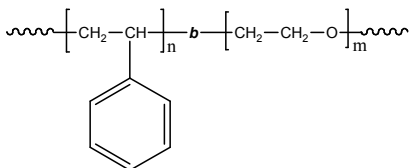


**Sample Name:** Poly (styrene-b-ethylene oxide)

**Sample #:** P19462-SEO

**Structure:**



**Composition:**

Mn x 10 <sup>3</sup>	PDI
33.0-b-35.0	1.09

**Synthesis procedure:**

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

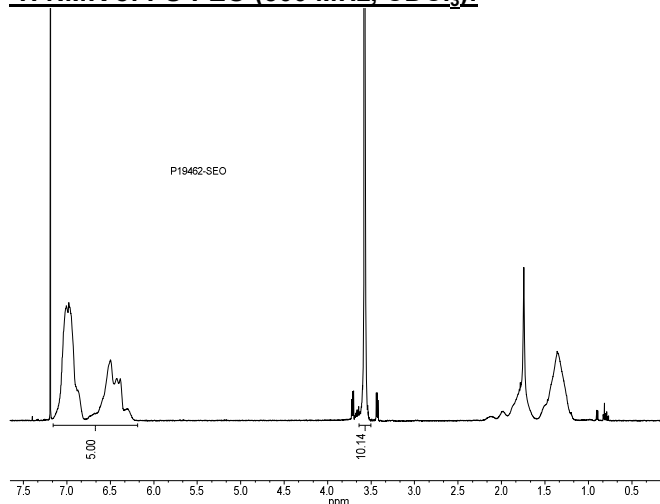
**Characterization:**

By size exclusion chromatography (SEC) and by <sup>1</sup>H-NMR.

**Solubility:**

The polymer is soluble in THF (at 35 °C), CHCl<sub>3</sub>, benzene, toluene, dioxane. Low molecular weight SEO with high contents of the polyethylene oxide block can also be solubilized in methanol and water.

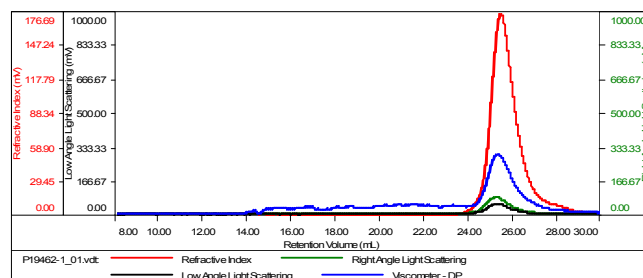
**<sup>1</sup>H NMR of PS-PEO (500 MHz, CDCl<sub>3</sub>):**



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

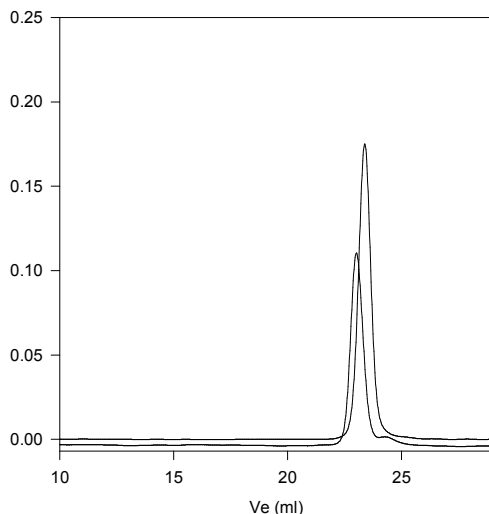
**Sample ID**P19462-S

Concentration (mg/mL)	1.2126
Sample dn/dc (mL/g)	0.1850
Method File	PS80K-June30-2015-0000.vcm
Column Set	3x PL 1113-6300
Solvent	THF



Sample	MW Number Average (Da)	MW Weight Average (Da)	MW at Peak (Da)	Polydispersity	Intrinsic Viscosity (dL/g)
P19462-1_01.vdt	32,994	36,613	31,383	1.110	1.3912

**P19462-SEO**



Size exclusion chromatography of poly(styrene-b-ethylene oxide)

— Poly(styrene), M<sub>n</sub>=33000, M<sub>w</sub>=36,500, PI=1.11

— Block Copolymer PSt(33,000)-b-PEO(35,000), PI=1.09  
Composition from <sup>1</sup>H NMR