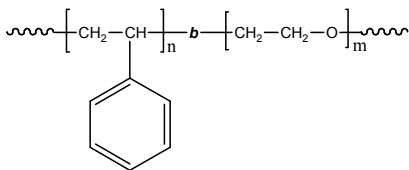


**Sample Name:** Poly (styrene-b-ethylene oxide)

**Sample #:** P19450-SEO

**Structure:**



**Composition:**

Mn x 10 <sup>3</sup>	PDI
35.0-b-10.5	1.10

**Synthesis procedure:**

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

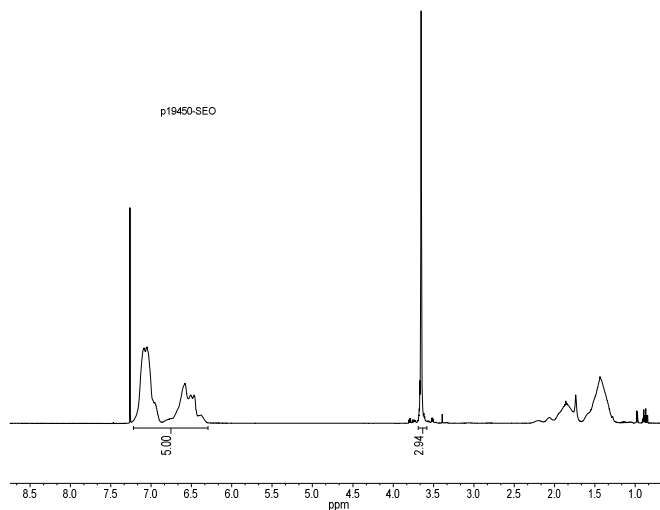
**Characterization:**

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

**Solubility:**

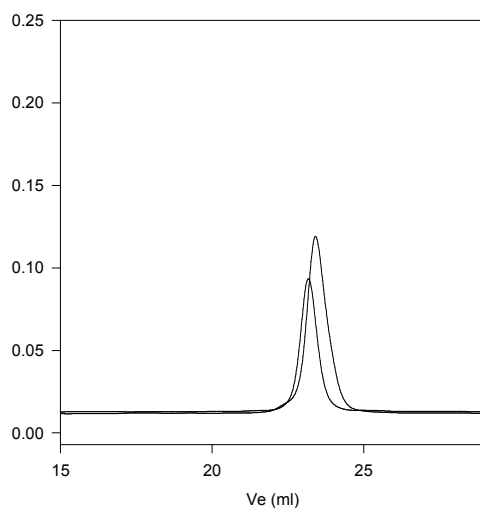
The polymer is soluble in THF (at 35 °C), CHCl<sub>3</sub>, benzene, toluene, dioxane. Low molecular weight SEO with high contents of the polyethylene oxide block can also be solubilized in methanol and water.

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



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

**P19450-SEO**



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

— Poly(styrene), M<sub>n</sub>=35,000, M<sub>w</sub>=37,000, PI=1.06

— Block Copolymer PSt(35,000)-b-PEO(10,500), PI=1.10  
Composition from <sup>1</sup>H NMR