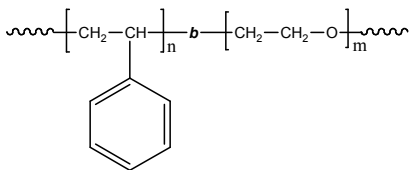


**Sample Name:** Poly (styrene-b-ethylene oxide)

**Sample #:** P19449-SEO

**Structure:**



**Composition:**

Mn x 10 <sup>3</sup>	PDI
114.0-b-31.0	1.18

**Synthesis procedure:**

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

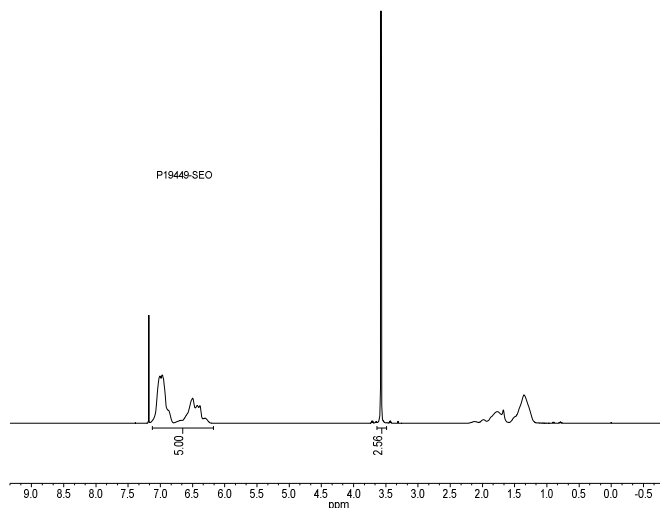
**Characterization:**

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

**Solubility:**

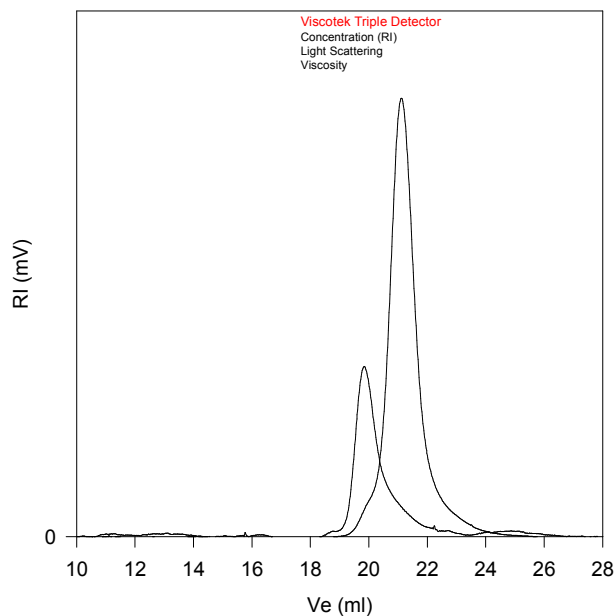
The polymer is soluble in THF (at 35 °C), CHCl<sub>3</sub>, benzene, toluene, dioxane. Low molecular weight SEO with high contents of the polyethylene oxide block can also be solubilized in methanol and water.

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



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

**P19449-SEO**



Size Exclusion Chromatography of Poly Styrene-b-MMA

—— PS block M<sub>n</sub> = 114,000, M<sub>w</sub> = 131,500, M<sub>w</sub>/M<sub>n</sub> = 1.15  
PS-b-EO: Mn 114,000-b-31,000 PI: 1.18