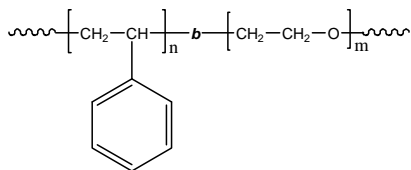


Sample Name: Poly(styrene-b-ethylene oxide)

Sample #: P18929A-SEO

Structure:



Composition:

$M_n \times 10^3$	PDI
3.5-b-2.5	1.09

Synthesis Procedure:

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

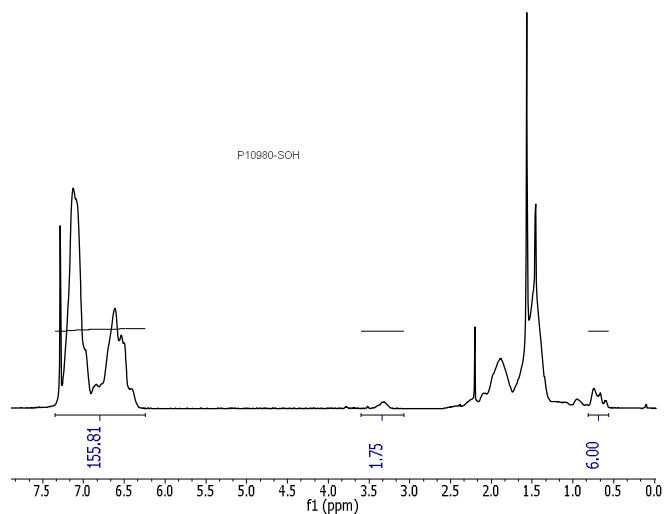
Characterization:

By size exclusion chromatography (SEC) and by $^1\text{H-NMR}$.

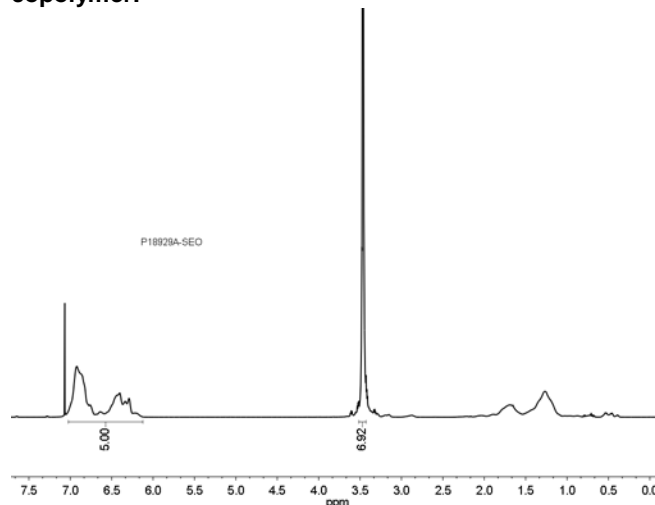
Solubility:

The polymer is soluble in THF (at 35 °C), CHCl_3 , benzene, toluene, dioxane. Low molecular weight SEO with high contents of the polyethylene oxide block can also be solubilized in methanol and water.

$^1\text{H NMR}$ (500 MHz, CDCl_3) of the PS-OH homopolymer:

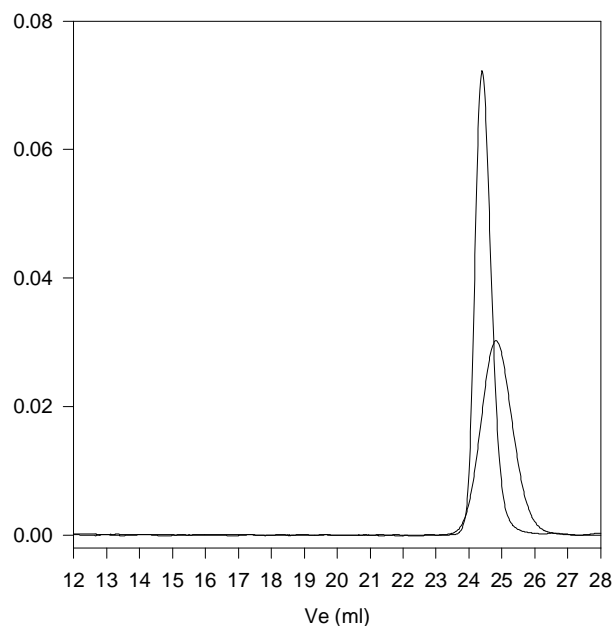


$^1\text{H NMR}$ (500 MHz, CDCl_3) of the PS-PEO diblock copolymer:



SEC elograms of PS and PS-PEO:

P18929A-SEO



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

— Poly(styrene), $M_n=3,500$, $M_w=3,900$, $PI=1.11$

— Block Copolymer PS(3,500)-b-PEO(2,500), $PI=1.09$