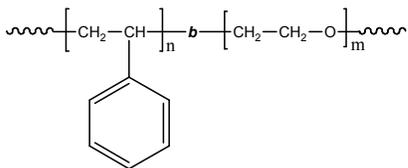


Sample Name: Poly (styrene-b-ethylene oxide)

Sample #: P19466-SEO

Structure:



Composition:

| Mn x 10 ³ | PDI |
|----------------------|------|
| 130.0-b-21.0 | 1.09 |

Synthesis procedure:

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

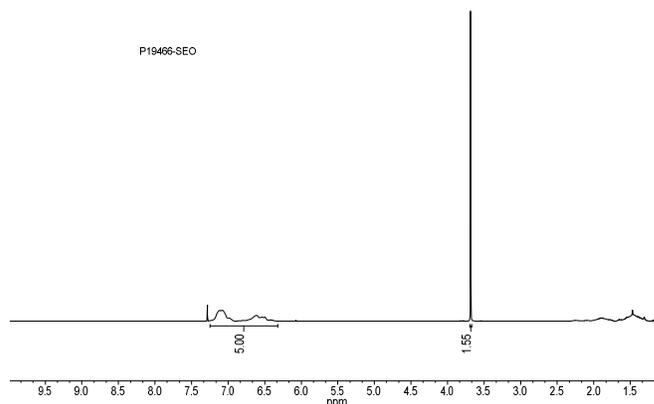
Characterization:

By size exclusion chromatography (SEC) and by ¹H-NMR.

Solubility:

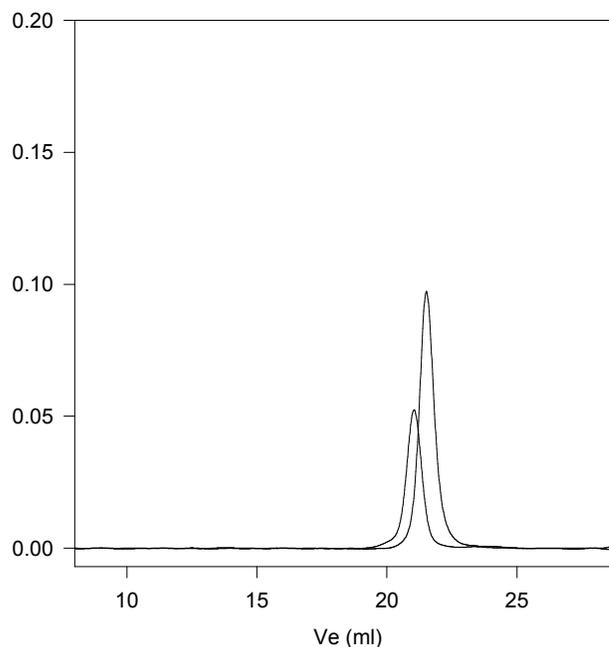
The polymer is soluble in THF (at 35 °C), CHCl₃, benzene, toluene, dioxane. Low molecular weight SEO with high contents of the polyethylene oxide block can also be solubilized in methanol and water.

¹H NMR of PS-PEO (500 MHz, CDCl₃):



SEC elugrams of PS and PS-PEO:

P19466-SEO



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

— Poly(styrene), M_n=130,000, M_w=138,400, PI=1.06

— Block Copolymer PSt(130,000)-b-PEO(21,000), PI=1.09
Composition from ¹H NMR