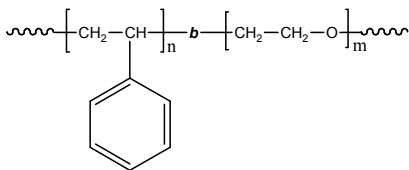


Sample Name: Poly (styrene-b-ethylene oxide)

Sample #: P19463-SEO

Structure:



Composition:

Mn x 10 ³	PDI
40.0-b-40.5	1.09

Synthesis procedure:

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

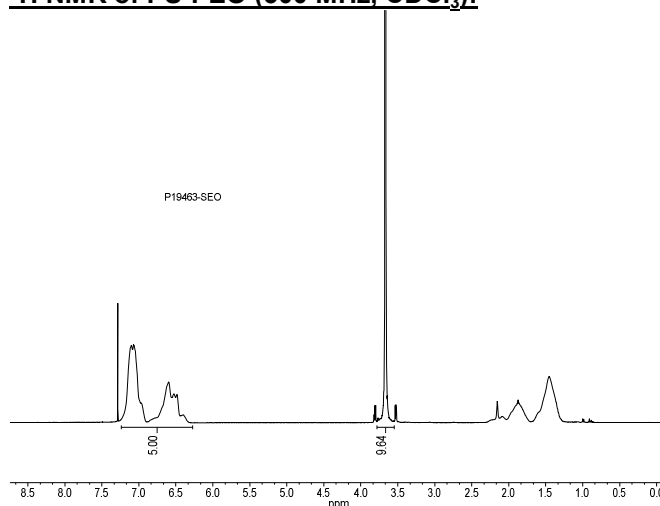
Characterization:

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):

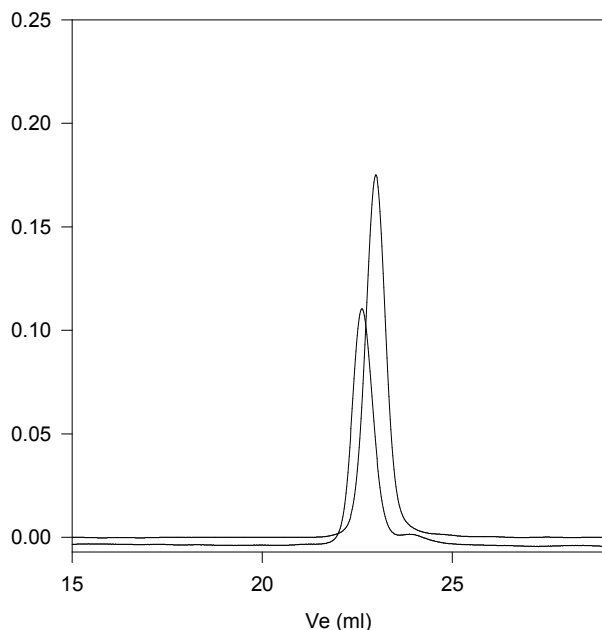


SEC elugrams of PS and PS-PEO:

Sample ID: P19463-S

Concentration (mg/mL)	1.2221
Sample dn/dc (mL/g)	0.1850
Method File	PS80K-June30-2015-0000.vcm
Column Set	3x PL 1113-6300
Solvent	THF

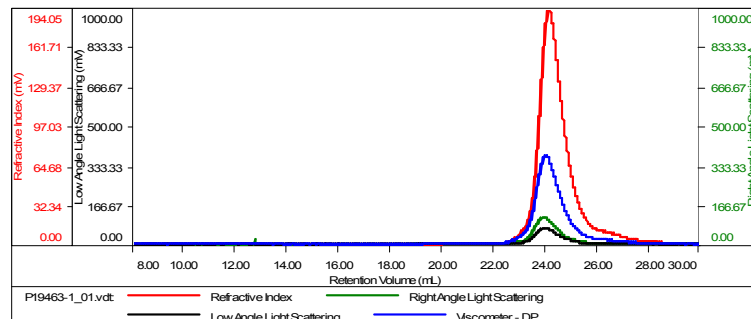
P19463-SEO



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

— Poly(styrene), M_n=40,000, M_w=42,000, PI=1.08

— Block Copolymer PSt(40,000)-b-PEO(40,500), PI=1.09
Composition from ¹H NMR



Sample	MW Number Average (Da)	MW Weight Average (Da)	MW at Peak (Da)	Polycdispersi	Intrinsic Viscosity (dL/g)
P19463-1_01.vdt	39,223	42,338	38,817	1.079	1.2578