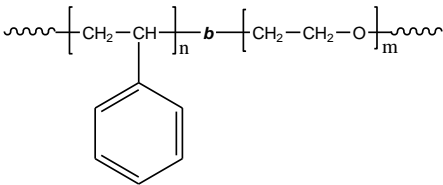


Sample Name: Poly (styrene-b-ethylene oxide)

Sample #: P40595A-SEO

Structure:



Composition:

Mn x 10 <sup>3</sup> S-b-EO	PDI
137.0-b-16.5	1.05

Synthesis Procedure:

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

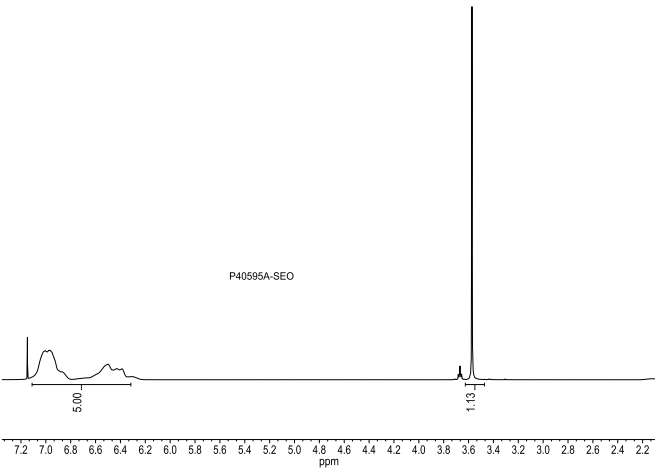
Characterization:

The product was characterized by size exclusion chromatography (SEC) and <sup>1</sup>H NMR.

Solubility:

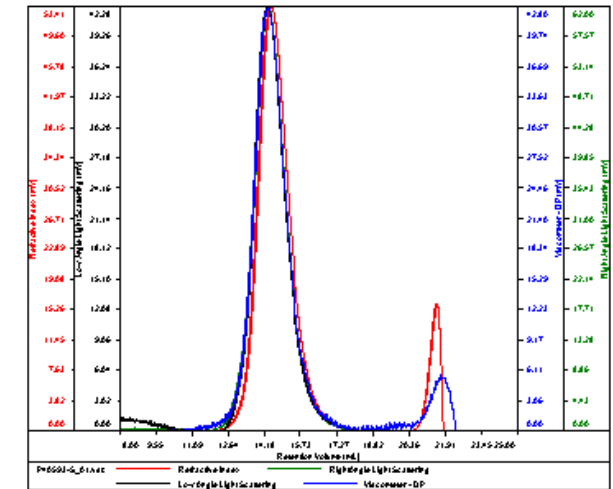
The polymer is soluble in THF (at 35 °C), CHCl<sub>3</sub>, benzene, toluene, and dioxane. Low molecular weight SEO with high contents of the polyethylene oxide block can also be solubilized in methanol and water.

<sup>1</sup>H NMR spectrum of the polymer:



SEC elugram of the Styrene block:  
P40595A-S Block

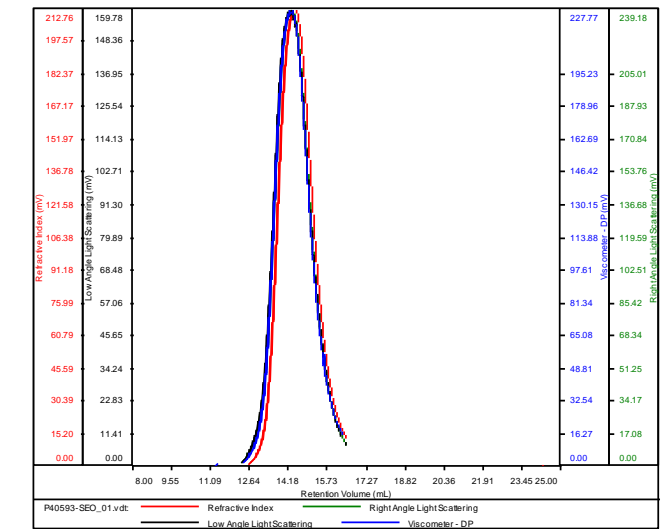
Conc	3.7000
dn/dc	0.1660
Solvent	DMF w 0.023M LiBr
Flow Rate	0.7000
Method	PS80k-May2017-0000.vcm



Sample	Mn	Mw	Mp	Mw/Mn	IV
P40595A-S-Block	136,769	144,896	135,483	1.069	0.2070

SEC elugram of the block copolymer:  
P40595A-S-EO

Conc	18.6702
dn/dc	0.1410
Solvent	DMF w 0.023M LiBr
Flow Rate	0.7000
Method	PS80k-May2017-0000.vcm



Sample	Mn	Mw	Mp	Mw/Mn	IV
P40593-SEO_01.vdt	153,881	162,559	155,620	1.056	0.2300