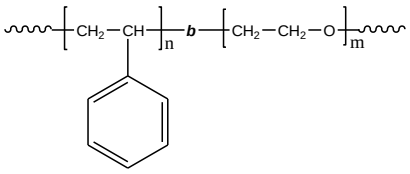
Sample Name: **Poly (styrene-b-ethylene oxide)**

Sample #: **P18867-SEO**

Structure:



Composition:

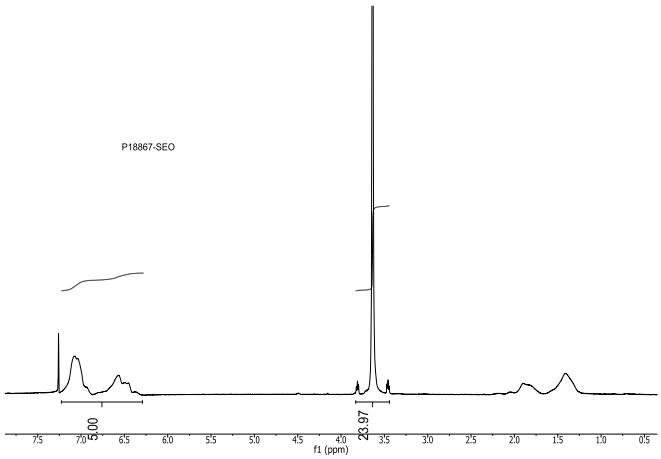
Mn x 10^3	PDI
13.5-b-34.5	1.30

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

Characterization:
The polymer is characterized by size exclusion chromatography (SEC) and ^{1}H-NMR.

Solubility:
The polymer is soluble in THF, $CHCl_3$, benzene, toluene, dioxane. Low molecular weight SEO with high contents of the polyethylene oxide block can also be solubilized in methanol and water.

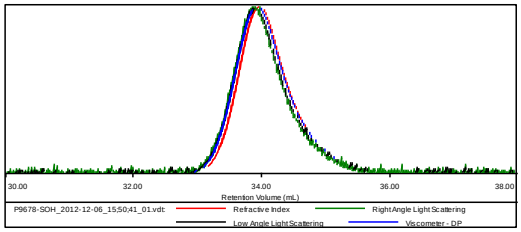
^{1}H NMR spectrum of the sample:



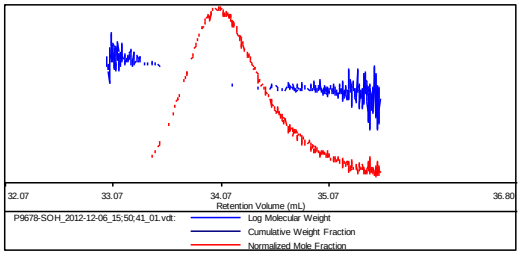
SEC elugram of the first block PS-OH:

Sample ID: P9678-SOH

Concentration (mg/mL)	7.2209
Sample dn/dc (mL/g)	0.1850
Method File	PS80K-Nov-2012-0001.vcm
Column Set	3x PL 1113-6300
System	System 1



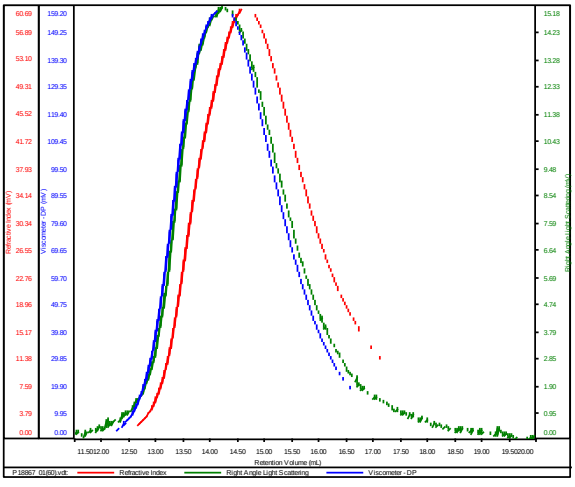
Sample	Mn (Da)	Mw (Da)	Mp (Da)	Mw/Mn	IV (dL/g)
P9678-SOH_2012-12-06_15;50;41_01.v	13,472	14,141	14,405	1.050	0.1668



SEC elugram of the block polymer:

P18867-SEO

Conc	7.2868
dn/dc	0.0920
Solvent	DMF w 0.023M LiBr
Flow Rate	0.7000
Method	PS80k_2017-11-07-0000.vcm



Sample	Mn	Mw	Mp	Mw/Mn	IV
P18867_01(60).vdt	48,107	62,463	60,447	1.298	23.0432