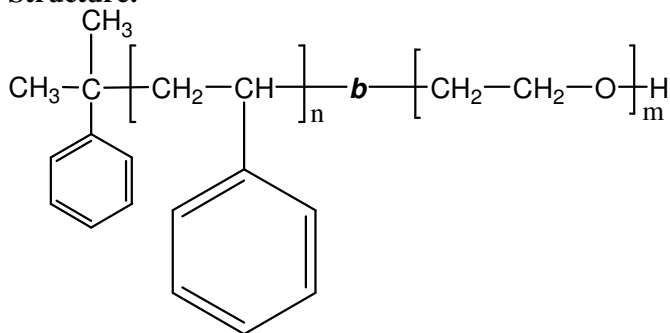


Sample Name: Poly(styrene-b-ethylene oxide)

Sample #: P19995-SEO

Structure:



Composition:

Mn x 10 ³	PDI
340.0-b-12.0	1.055

Synthesis Procedure:

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

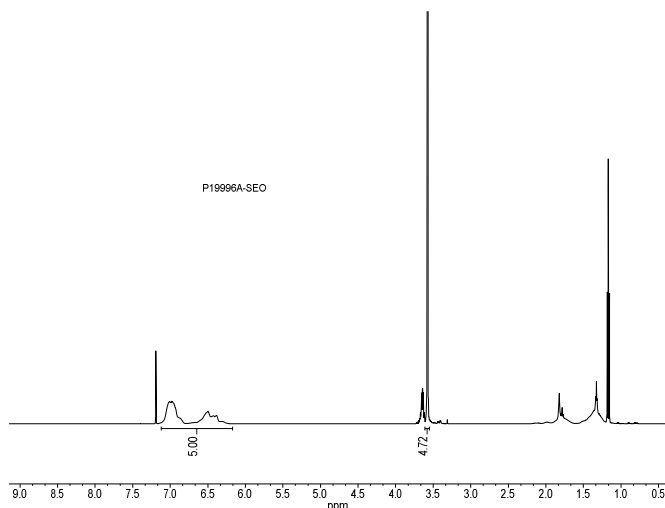
Characterization:

The polymer was characterized by ¹H NMR and size exclusion chromatography (SEC).

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 spectrum of the sample: SEO



Thermal analysis results:

Thermal analysis was done on a TA Q100 differential scanning calorimeter at a heating rate of 20°C/min. The midpoint of the slope change of the heat flow plot of the second heating scan was considered as the glass transition temperature (T_g).

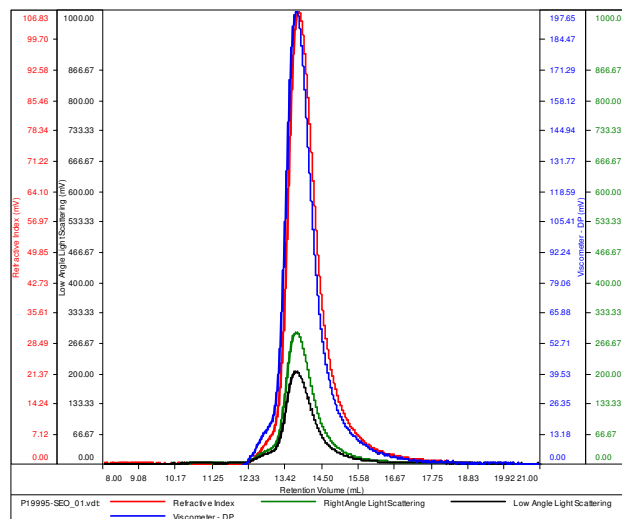
The melting temperature (T_m) was taken as a maximum of the endothermic peak.

For PS block: T _g : 85°C	
For PEO block:	
T _g : -63°C	T _m : 61°C

SEC elugram of the polymer:

P19995-SEO

Conc (mg/mL)	2.6302
dn/dc (mL/g)	0.1650
Method	PS80k-May-25-2016-0000.vcm
Solvent	DMF w 0.023M LiBr
Column	PSS



Sample	Mn	Mw	Mp	Mw/Mn	IV
P19995-SEO_01.vdt	351,760	371,167	359,597	1.055	0.8916