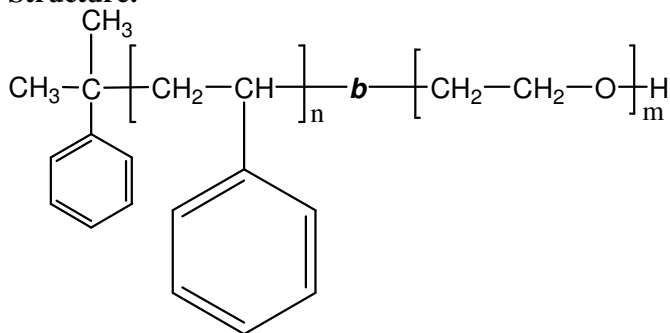


Sample Name: Poly(styrene-b-ethylene oxide)

Sample #: P40016-SEO

Structure:



Composition:

Mn x 10 ³	PDI
238.0-b-67.0	1.05

Synthesis Procedure:

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

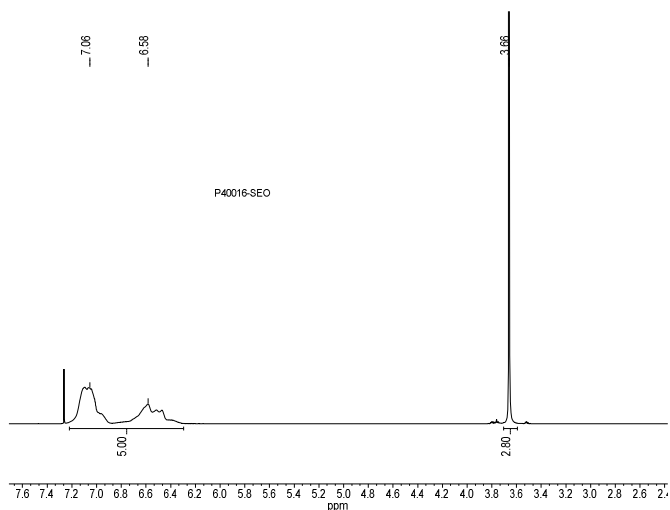
Characterization:

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:

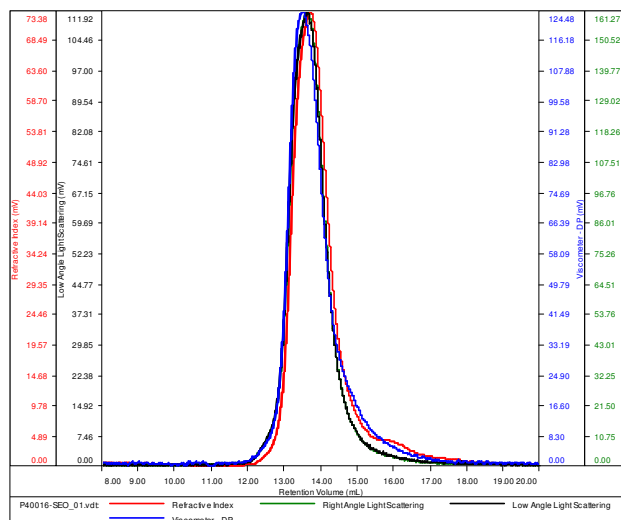
T_g: -63°C

T_m: 61°C

SEC elugram of the polymer:

P40016-SEO

Conc (mg/mL)	2.2172
dn/dc (mL/g)	0.1500
Method	PS80k-May-25-2016-0000.vcm
Solvent	DMF w 0.023M LiBr
Column	PSS



Sample	Mn	Mw	Mp	Mw/Mn	IV
P40016-SEO_01.vdt	305,174	321,709	321,339	1.054	0.7636