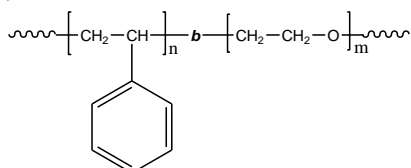


Sample Name: Poly (styrene-b-ethylene oxide)

Sample #: P41172-SEO

Structure:



Composition:

Mn x 10 ³	PDI
5.2-b-5.5	1.07

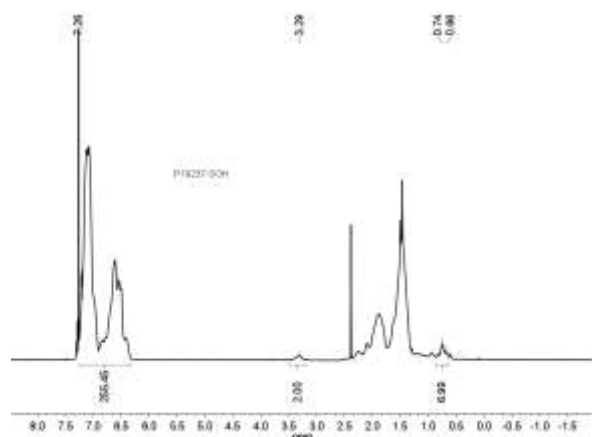
Synthesis Procedure:

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

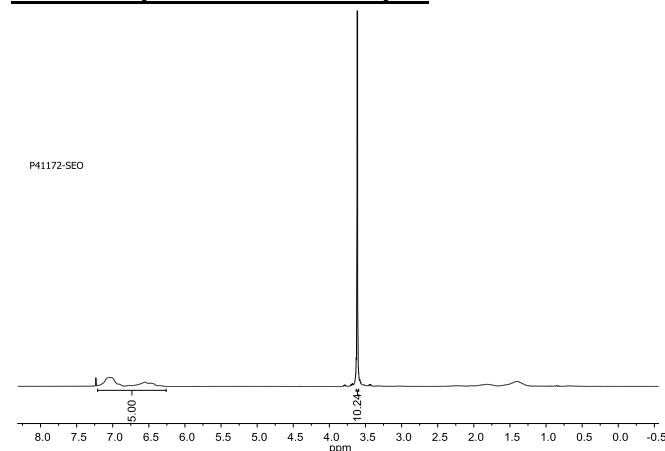
Characterization:

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

¹H NMR spectrum of the SOH sample:



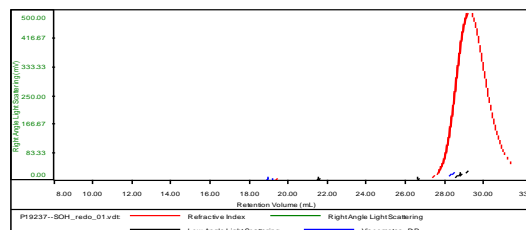
¹H NMR spectrum of the sample:



SEC of the SOH terminated used:

Sample ID: P19237-SOH

Concentration (mg/mL)	2.7122
Sample dn/dc (mL/g)	0.1850
Method File	PS80K-April13-2015-0000.vcm
Column Set	3x PL 1113-6300
Solvent	THF

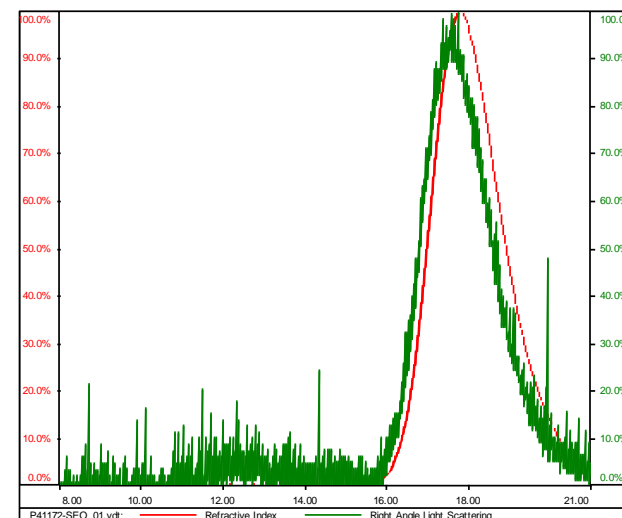


Sample	MW Number Average (Da)	MW Weight Average (Da)	MW at Peak (Da)	Polydispersity	Intrinsic Viscosity (dL/g)
P19237-SOH_redo_01.vdt	5,153	5,467	4,911	1.061	0.1620

SEC profile of the block copolymer:

P41172-SEO

Conc	4.2811
dn/dc	0.0787
Solvent	DMF w 0.023M LiBr
Flow Rate	0.7000
Method	PS99k_2018-05-30-0000.vcm



Sample	Mn	Mw	Mp	Mw/Mn	IV
P41172-SEO_01.vdt	10,422	11,163	10,836	1.071	0.2442

Thermal analysis results

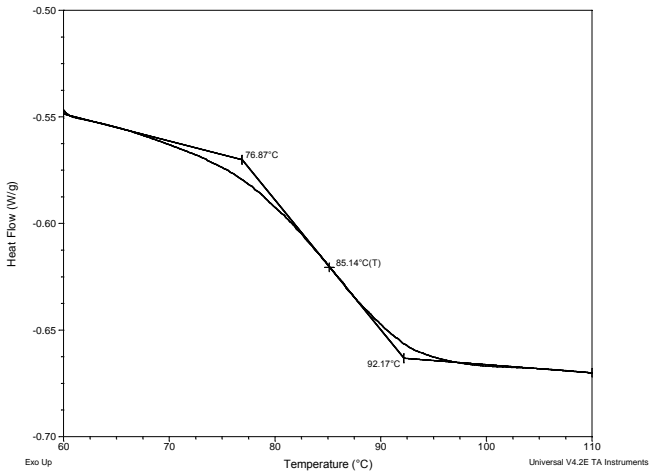
Thermal analysis was done on a TA Q100 differential scanning calorimeter at a heating rate of 20°C/min. The midpoint of the slope change of the heat flow plot of the second heating scan was considered as the glass transition temperature (T_g).

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

DSC curves are presented on the next page.

Tg curve for PS block:

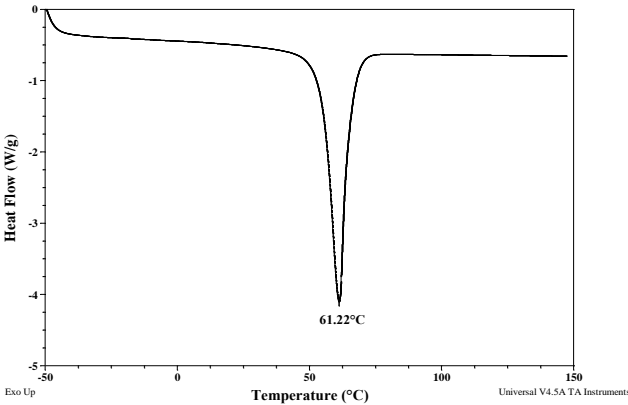


DSC thermogram of the Sample:

Tm curve for PEO block:

Size: 10.5000 mg

DSC



Tg curve for PEO block:

