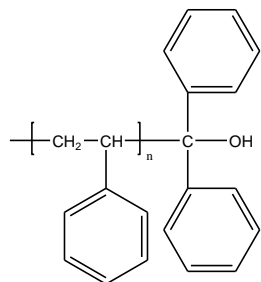


Sample Name:
 ω -Hydroxy Terminated Polystyrene

Sample #: P8766- SOH

Structure:

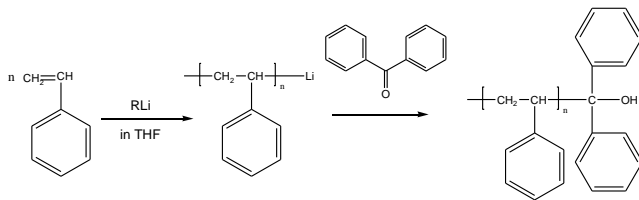


Composition:

$M_n \times 10^3$	PDI
32.0	1.05
T_g ($^{\circ}\text{C}$)	106

Synthesis Procedure:

ω -Hydroxy Terminated Polystyrene was prepared by living anionic polymerization. The scheme of the reaction is illustrated below:



Characterization:

The molecular weight and polydispersity index of this polymer were determined by size exclusion chromatography (SEC) using a Varian liquid chromatograph equipped with a UV and refractive index detector. Polymer functionality was determined by titration with NaOH using phenolphthalein as the indicator.

Thermal analysis:

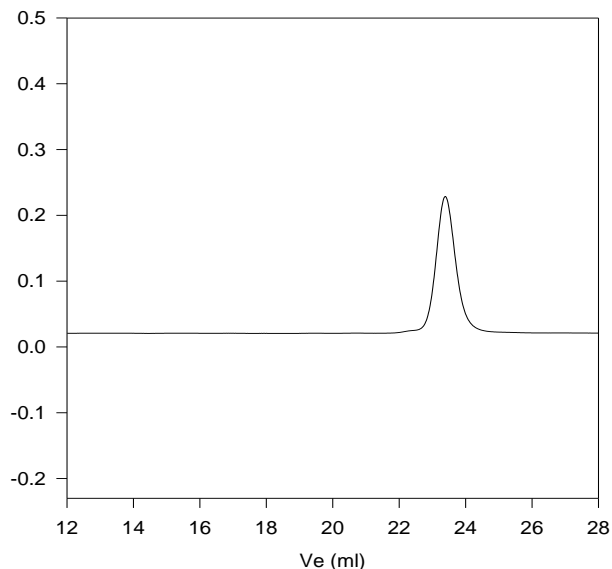
Thermal analysis of the samples was carried out using a differential scanning calorimeter (TA Q100) at a heating rate of $10^{\circ}\text{C}/\text{min}$. The inflection glass transition temperature (T_g) has been considered.

Solubility:

Polymer is soluble in toluene, THF, CHCl_3 and can be precipitated in water and cold methanol.

SEC of Sample:

P8766-SOH



Size exclusion chromatography of polymer
 — PS, $M_n=32,000$, $M_w=33,600$, $M_w/M_n=1.05$

DSC thermogram for the sample:

