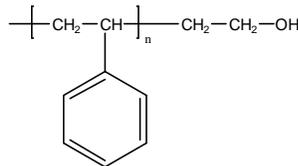


Sample Name:

? -Hydroxy Terminated Polystyrene

Sample #: P10140- SOH

Structure:

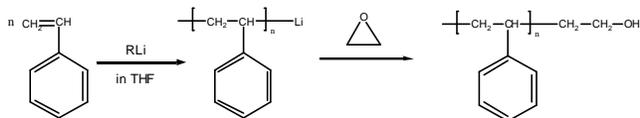


Composition:

Mn x 10 ³	PDI
5.5	1.09
T _g (°C)	80

Synthesis Procedure:

? , -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 solution using phenolphthalein as the indicator.

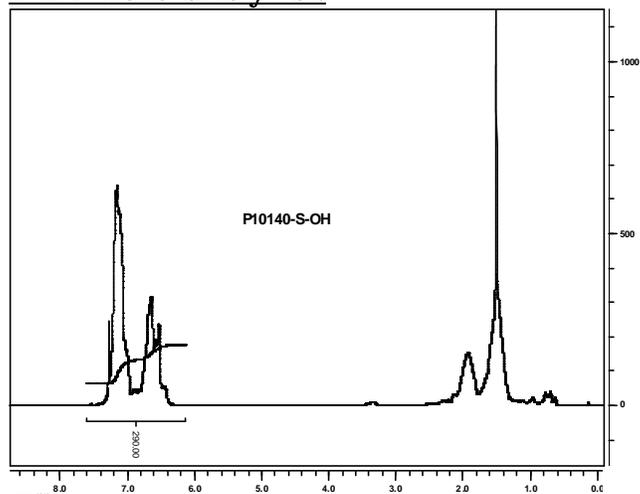
Thermal analysis:

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

Solubility:

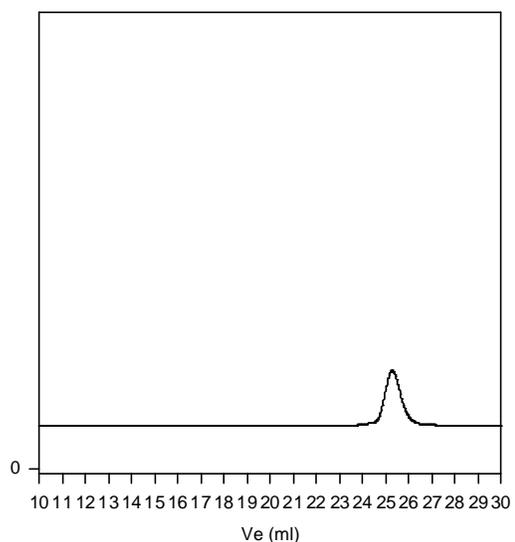
Polymer is soluble in toluene, THF, CHCl₃ and can be precipitated in water and cold methanol.

HNMR of the Polymer:



SEC of Sample:

P10140-SOH



Size Exclusion chromatography of Hydroxy end poly styrene
— Polystyrene, M_n=5,500, M_w=6,000 PI=1.09

DSC thermogram for the sample:

