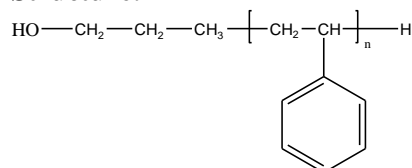


Sample Name: **α -Hydroxy Terminated Polystyrene**

Sample #: **P5338-SOH**

Structure:



Composition:

| Mn x 10 ³ | PDI |
|----------------------|-----|
| 24.0 | 1.4 |
| T _g (°C) | 84 |

Synthesis Procedure:

α -Hydroxy Terminated Polystyrene was prepared by living anionic polymerization using hydroxyl protected initiator (ethyl-3-lithiopropylacetaldehyde).

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:

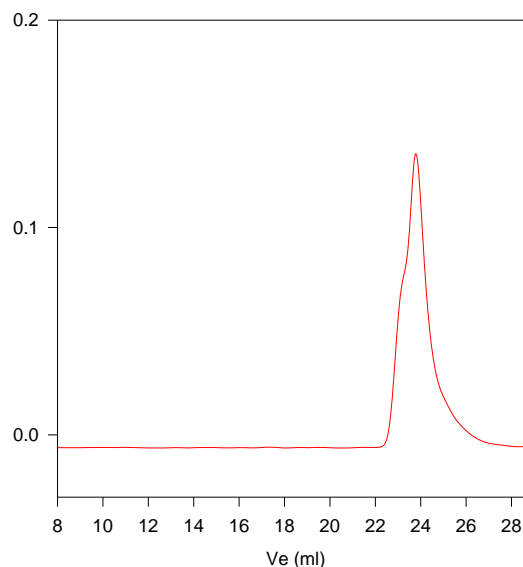
Thermal analysis of the samples was carried out using a differential scanning calorimeter (TA Q100) at a heating rate of 10°C/min. The inflection glass transition temperature (T_g) has been considered.

Solubility:

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

SEC of Sample:

P5338-SOH



M_n=24000, M_w=34000, PI=1.4, functionality>99%

Size exclusion chromatography of α hydroxy Terminated polystyrene:

DSC thermogram for the sample:

