# <u>Sample Name</u>: **ω**Hydroxy Terminated Polystyrene

# Sample #: P19011- SOH

#### Structure:



#### **Composition:**

Mn x 10 <sup>3</sup>	PDI
13.5	1.07
Tg (°C)	80

## Synthesis Procedure:

 $\omega$ ,-hydroxy terminated polystyrene was prepared by living anionic polymerization using OH protected initiator.

## Characterization:

The molecular weight and polydispersity index of this determined by size polymer were 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  $10^{\circ}$ C/min.The inflection glass transition temperature (T<sub>e</sub>) has been considered.

#### Solubility:

Polymer is soluble in toluene, THF, CHCl<sub>3</sub> and can be precipitated in water and cold methanol.

#### SEC of Sample: P19011-PSOH





## DSC thermogram for the sample:

