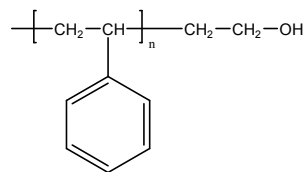


**Sample Name:**  
 **$\omega$ -Hydroxy Terminated Polystyrene**

**Sample #: P1609- SOH**

**Structure:**

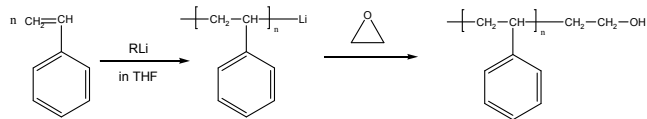


**Composition:**

Mn x 10 <sup>3</sup>	PDI
51.0	1.03
T <sub>g</sub> (°C)	100

**Synthesis Procedure:**

$\omega$ -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.

**Thermal analysis:**

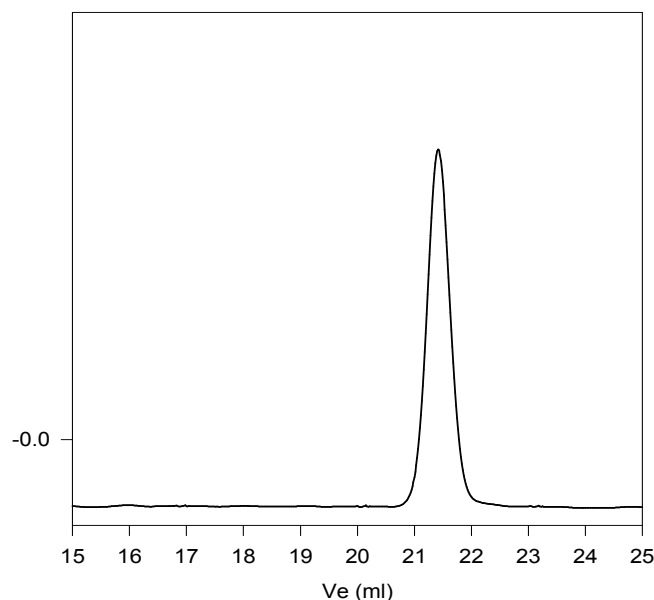
Thermal analysis of the samples was carried out on a TA Q100 differential scanning calorimeter at a heating rate of 10°C/min. The midpoint of the slope change of the heat flow plot of the second heating scan was considered as the glass transition temperature (T<sub>g</sub>).

**Solubility:**

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

**SEC of Sample:**

**P1609-PSOH**



Size exclusion chromatography of hydroxy terminated polystyrene.  
M<sub>n</sub>=51000, M<sub>w</sub>=52500 PI=1.03, functionality > 99%

**DSC thermogram for the sample:**

