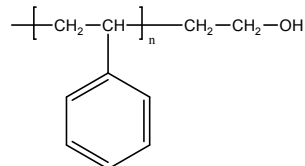
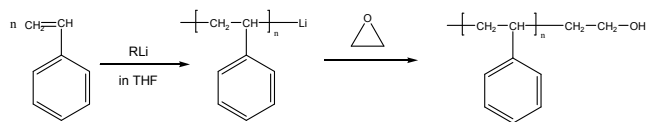


Sample Name: **ω -Hydroxy Terminated Polystyrene****Sample #: P4716- SOH****Structure:****Composition:**

Mn x 10 ³	PDI
38.0	1.09
T _g (°C)	101

Synthesis Procedure:

ω -Hydroxy terminated polystyrene was prepared by anionic living polymerization of styrene in THF followed by termination with ethylene oxide. The scheme of the reaction is illustrated below:

**Characterization:**

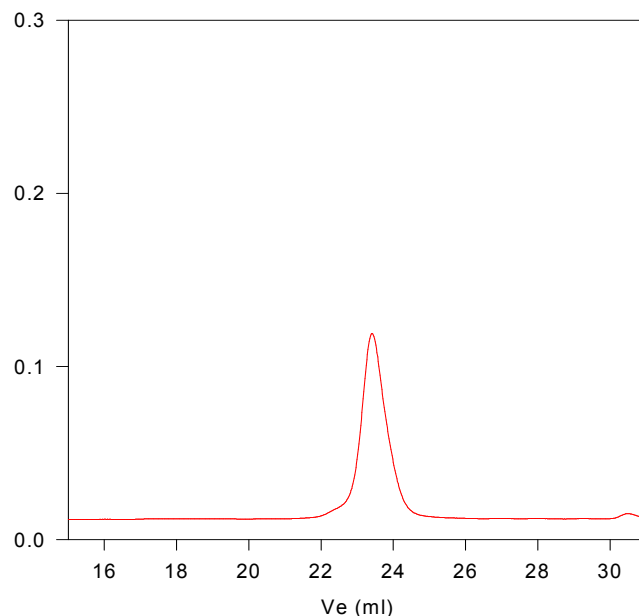
The molecular weight and polydispersity index of this polymer were determined by size exclusion chromatography (SEC) using a Varian liquid chromatograph equipped with a UV and refractive index detector.

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_g).

Solubility:

Polystyrene is soluble in DMF, THF, toluene and CHCl₃. It precipitates from methanol, ethanol, water and hexanes.

SEC of Sample:**P4716-SOH**

Size exclusion chromatography of ω hydroxy Terminated polystyrene
M_n=38000, M_w=41500, PI=1.09, functionality>99%

DSC thermogram for the sample: