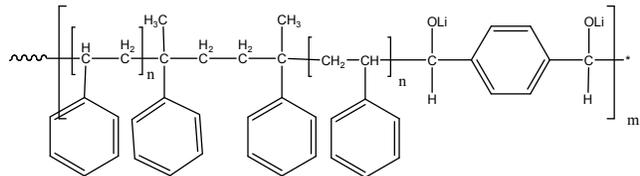


### Sample Name:

Polystyrene bearing dihydroxy groups in the center –Multi functional

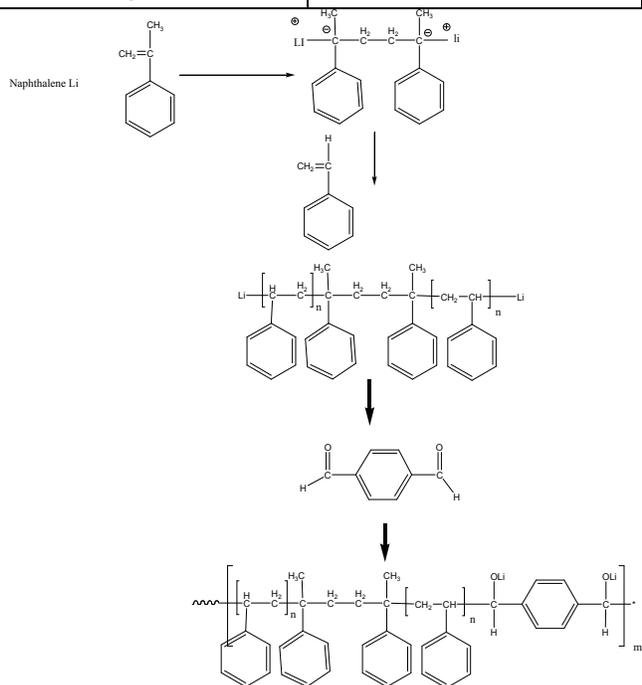
Sample #: P10095-S(2OH)<sub>x</sub>

### Structure:



### Composition:

Mn x 10 <sup>3</sup>	PDI
12.0	4.0
T <sub>g</sub> (°C)	100



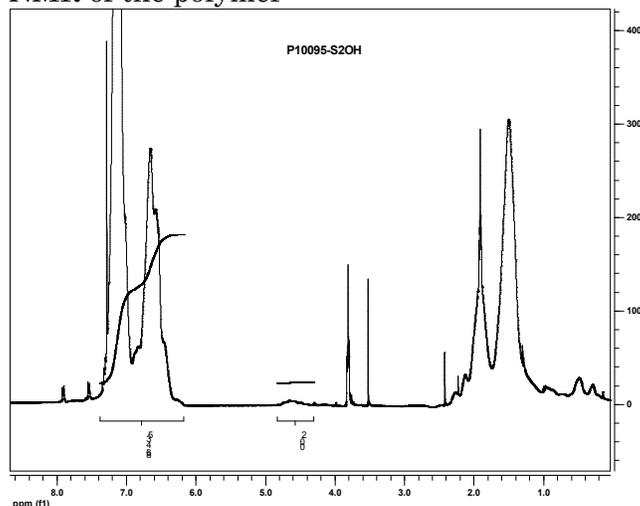
### Characterization:

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.

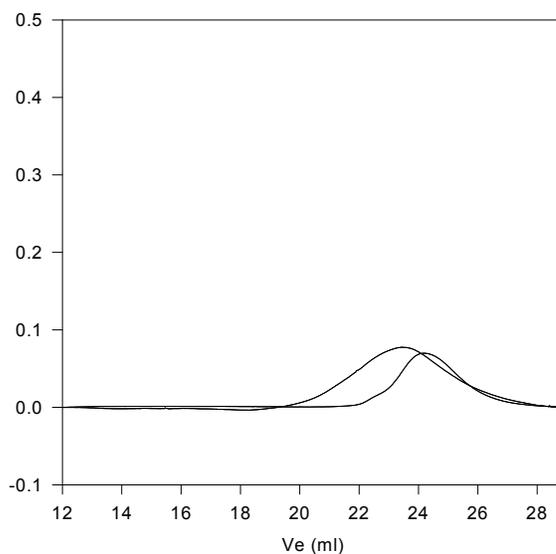
### Thermal analysis:

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>).

### NMR of the polymer:



### SEC for the functional polymer: P10095-S(2OH)



Size exclusion chromatography of dihydroxy in the center polystyrene:

M<sub>n</sub> = 7000, M<sub>w</sub> = 11200, PI = 1.6

After linking reaction : Mn 12,000 Mw/Mn: 4.0 functionality: >1.98%

### Thermogram for the polymer:

