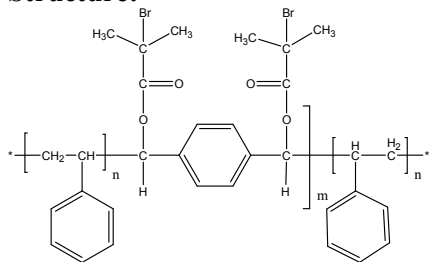
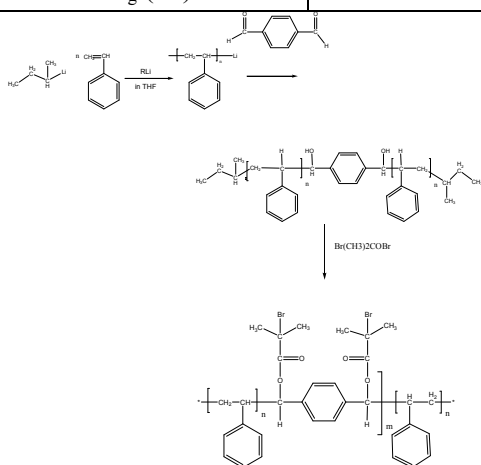


**Sample Name:****Dibromo group in the center of Polystyrene****Sample #:** P10092D-S2Br**Structure:****Composition:**

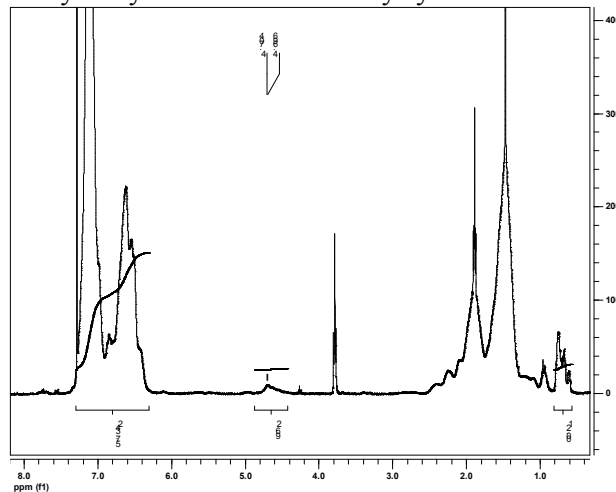
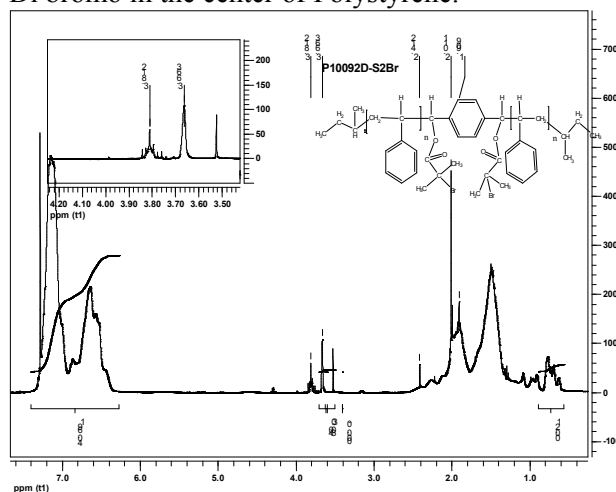
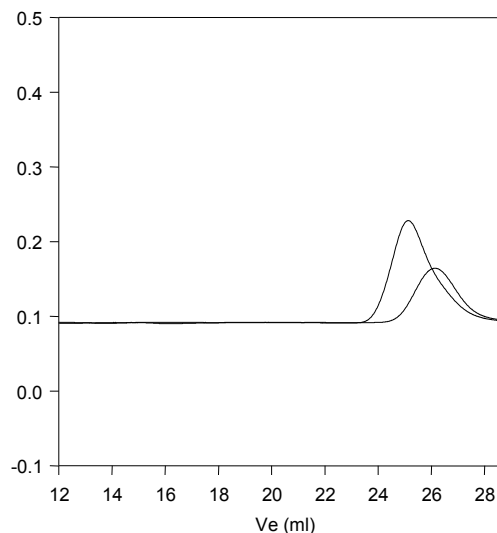
Mn x 10 <sup>3</sup>	PDI
5.0	1.4
T <sub>g</sub> (°C)	

**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>).

**Di hydroxyl in the center of Polystyrene****Di bromo in the center of Polystyrene:****SEC for the functional polymer:****P10092-S2OH**Size exclusion chromatography of  $\alpha$ -dihydroxy in the center polystyrene:M<sub>n</sub>=2500, M<sub>w</sub>=3500, PI=1.4

After linking reaction : Mn 5,000 Mw/Mn 1.4, functionality: &gt;1.98