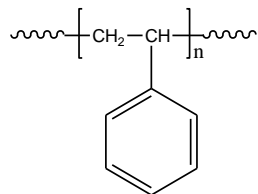


**Sample Name: Polystyrene-Broad  
Distribution**

**Sample #: P7630-S**

**Structure:**



**Composition:**

Mn x 10 <sup>3</sup>	PDI
9.5	1.35

**Synthesis Procedure:**

Polystyrene is obtained by living anionic polymerization of styrene using n Butyl lithium initiator.

**Characterization:**

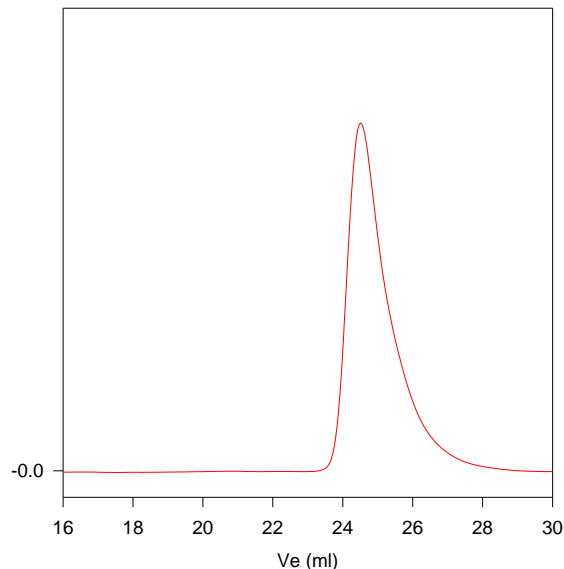
The molecular weight and polydispersity index (PDI) are obtained by size exclusion chromatography (SEC) in THF. SEC analysis was performed on a Varian liquid chromatograph equipped with refractive and UV light scattering detectors. Three SEC columns from Supelco (G6000-4000-2000 HXL) were used with triple detectors from Viscotek Co.

**Solubility:**

Polystyrene is soluble in DMF, THF, toluene and CHCl<sub>3</sub>. It precipitates from methanol, ethanol, water and hexanes.

**SEC of Homopolymer**

**P7630-S (broad distribution)**



Size exclusion chromatograph of polystyrene:

M<sub>n</sub>=9500, M<sub>w</sub>= 12800 M<sub>w</sub>/M<sub>n</sub>=1.35