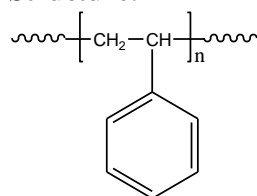


Sample Name: Polystyrene

SEC of the polymer:

Sample #: P11460-S

**Structure:**

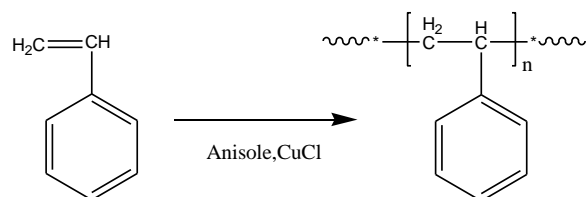


**Composition:**

$M_n \times 10^3$	PDI
95.0	1.25

**Synthesis Procedure:**

Polystyrene is obtained by free radical polymerization as illustrated below:



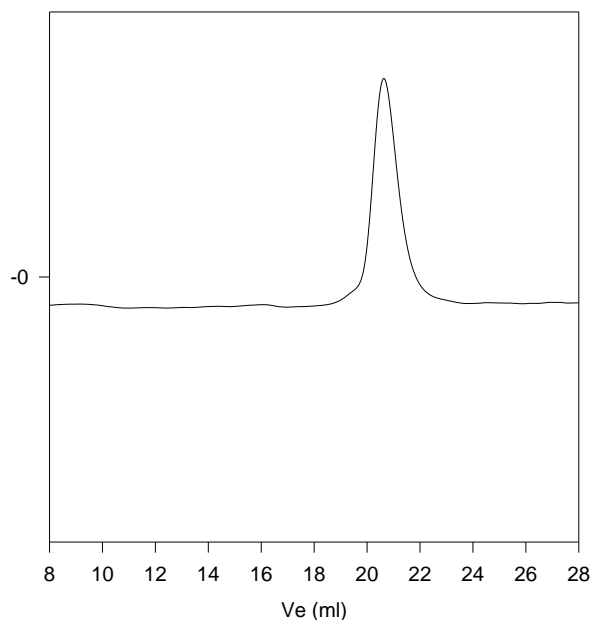
**Characterization:**

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  $\text{CHCl}_3$ . It precipitates from methanol, ethanol, water and hexanes.

P11460-S



Size exclusion chromatograph of polystyrene:

$M_n=95,000$   $M_w=118,000$ ,  $PI=1.25$