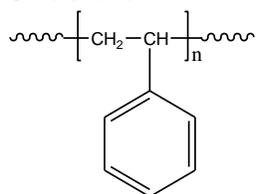


Sample Name: Polystyrene

Sample #: P10573-S

Structure:

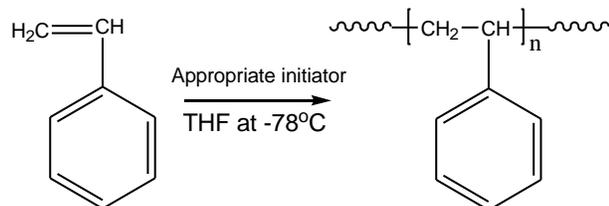


Composition:

| $M_n \times 10^3$ | PDI |
|-------------------|------|
| 6.8 | 1.09 |

Synthesis Procedure:

Polystyrene is obtained by living anionic polymerization of styrene as illustrated below:



Characterization:

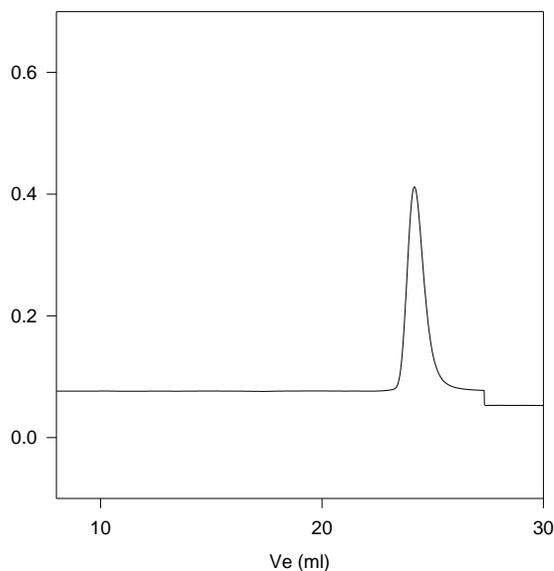
The molecular weight and polydispersity index (PDI) are obtained by size exclusion chromatography (SEC) in THF. SEC analysis was performed on a Varian liquid chromatograph equipped with refractive and UV light scattering detectors. Three SEC columns from Supelco (G6000-4000-2000 HXL) were used with triple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

Solubility:

Polystyrene is soluble in DMF, THF, toluene and CHCl_3 . It precipitates from methanol, ethanol, water and hexanes.

SEC of homopolymer:

P10573-S



— Polystyrene, $M_n=6,800$, $M_w=7,400$, $PI=1.09$