

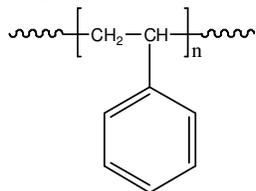
Sample Name:
Polystyrene (broad distribution)

SEC of Homopolymer

P2745-S

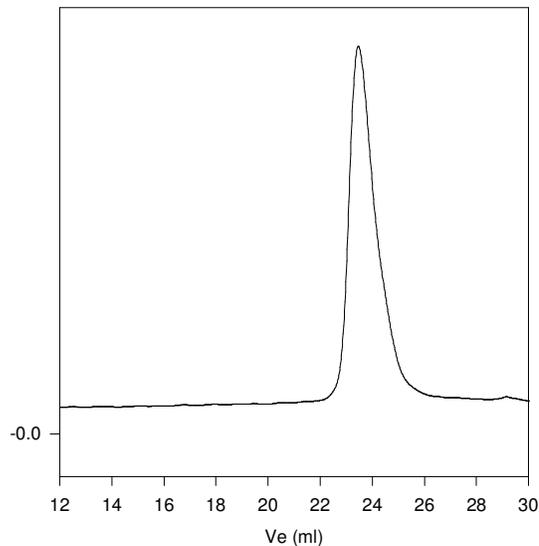
Sample #: P2745-S

Structure:



Composition:

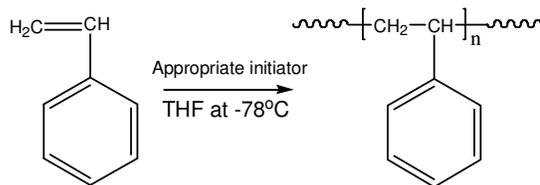
$M_n \times 10^3$	PDI
7.2	1.25



Size exclusion chromatograph of polystyrene:
 $M_n=7200$, $M_w=9000$ PI=1.25

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.

