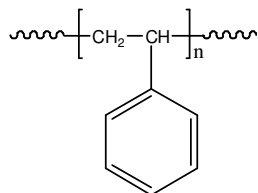


Sample Name: Polystyrene-Broad Distribution

Sample #: P5549-S

Structure:

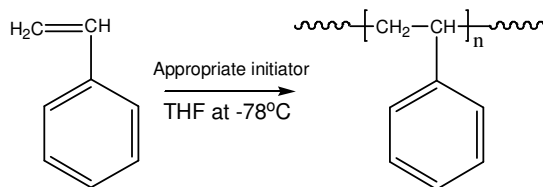


Composition:

Mn x 10 ³	PDI
1,041.00	1.3

Synthesis Procedure:

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



Characterization:

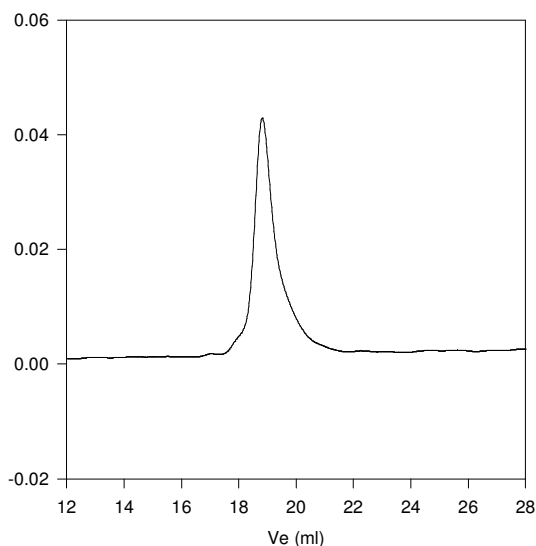
The molecular weight and polydispersity index (PDI) are obtained by size exclusion chromatography (SEC) in THF. SEC analysis was performed on a Varian liquid chromatograph equipped with refractive and UV light scattering detectors. Three SEC columns from Supelco (G6000-4000-2000 HXL) were used with triple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

P5549-S



Size exclusion chromatograph of polystyrene:

$M_n=1,041,000$, $M_w=1,364,000$ $PI=1.3$