

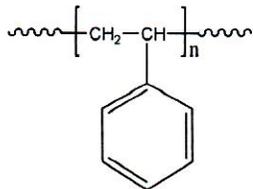
Sample Name: Polystyrene-Broad Distribution

SEC of Homopolymer

P11080-S

Sample #: P11080-S

Structure:



Composition:

$M_n \times 10^3$	PDI
195.0	1.95

Synthesis Procedure:

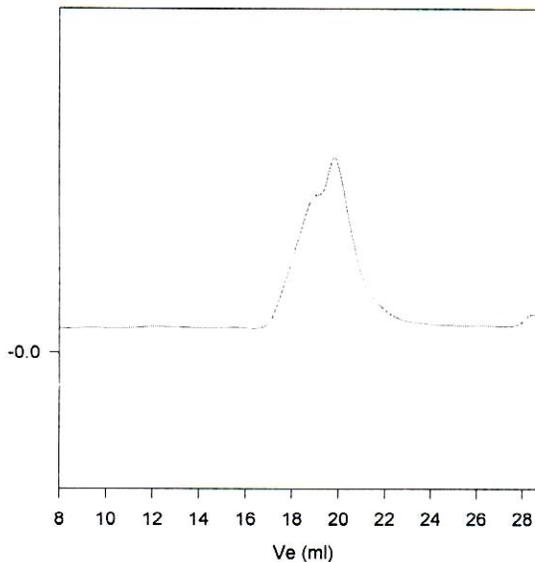
Polystyrene is obtained by free radical polymerization of styrene.

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.



Size exclusion chromatograph of polystyrene:

$M_n=195,000$, Pw: 395,000 $M_w/M_n=1.95$

T_g of polystyrene as function of molecular weight

