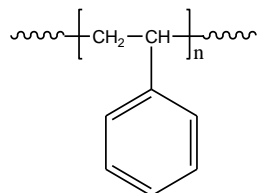


Sample Name: Polystyrene-Broad Distribution

Sample #: P9254-S

Structure:



Composition:

$M_n \times 10^3$	PDI
90.0	3.5

Synthesis Procedure:

Polystyrene is obtained by free radical polymerization of styrene.

Characterization:

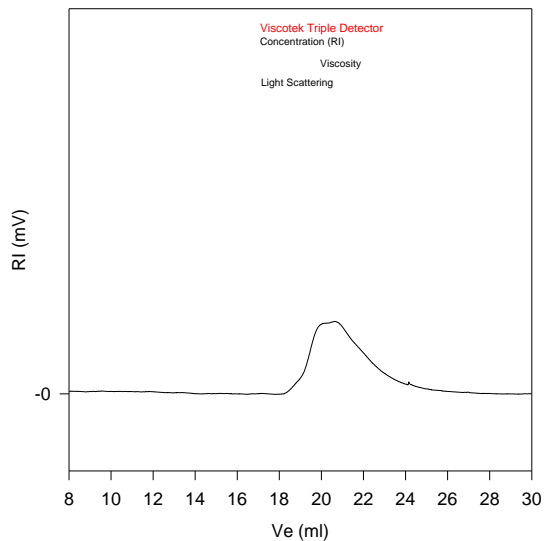
The molecular weight and polydispersity index (PDI) are obtained by size exclusion chromatography (SEC) in THF. SEC analysis was performed on a Varian liquid chromatograph equipped with refractive and UV light scattering detectors. Three SEC columns from Supelco (G6000-4000-2000 HXL) were used with triple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

Solubility:

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

SEC of Homopolymer

P9254-S



Size Exclusion Chromatography of polystyrene;

— $M_n = 90,000$, $M_w = 315,000$, $M_w/M_n = 3.5$

T_g of polystyrene as function of molecular weight

