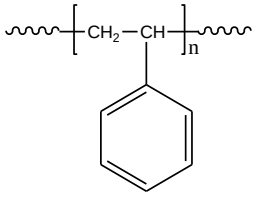
Sample Name: **Polystyrene-Broad Distribution**

Sample #: **P8713-S**

Structure:



Composition:

Mn x 10^3	PDI
90.0	1.45

Synthesis Procedure:
Polystyrene is obtained by free radical polymerization of styrene.

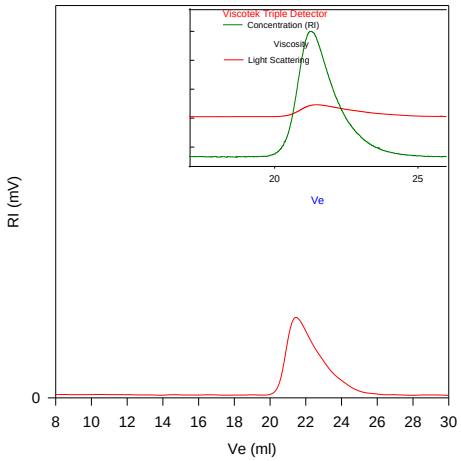
Characterization:

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

P8713-S (broad distribution)



Size Exclusion Chromatography of polystyrene;

M_n = 90,000, M_w =130,000, M_w/M_n = 1.45

In box Light Scattering data from Triple detectors:
dn/dc in THF 0.185ml/g Solution Viscosity in THF at 35 oC: 0.796dl/g
Rgw:14.42nm

T_g of polystyrene as function of molecular weight