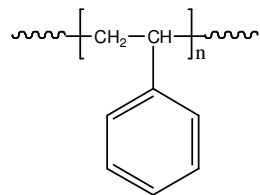


Sample Name: **Polystyrene-broad distribution**

Sample #: **P8761-S**

Structure:

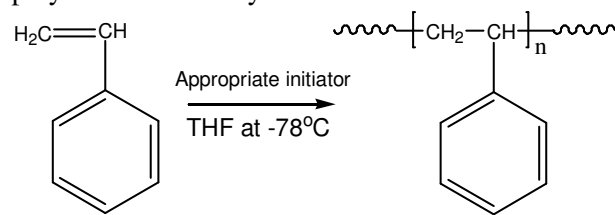


Composition:

Mn x 10 ³	PDI
500.0	1.5

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.

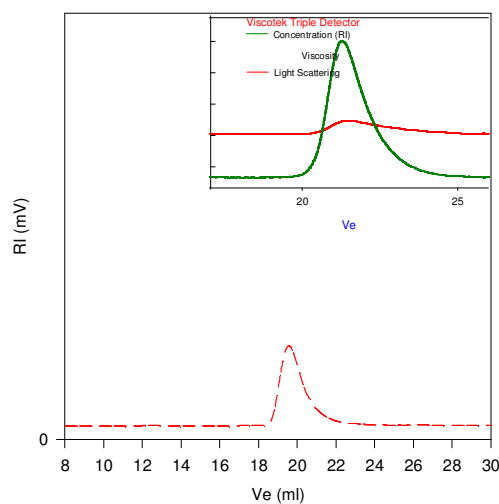
Thermal analysis of the sample was carried out using a differential scanning calorimeter (TA Q100) at a heating rate of 10°C/min. The inflection glass transition temperature (T_g) has been considered.

Solubility:

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

SEC of Homopolymer:

P8761-S (broad distribution)



Size Exclusion Chromatography of polystyrene;

--- $M_n = 500,000$, $M_w = 750,000$, $M_w/M_n = 1.5$

In box Light Scattering data from Triple detectors:
 dn/dc in THF 0.185ml/g

