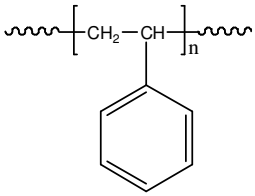
Sample Name: **Polystyrene**

Sample #: **P4092-S**

Structure:

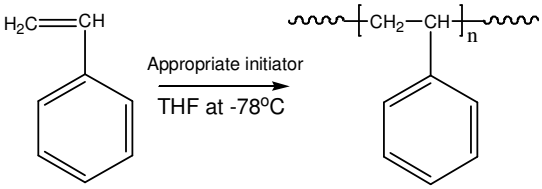


Composition:

Mn × 10^3	PDI
298.0	1.15

Synthesis Procedure:

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



Characterization:

The molecular weight and polydispersity index (PDI) were obtained by size exclusion chromatography.

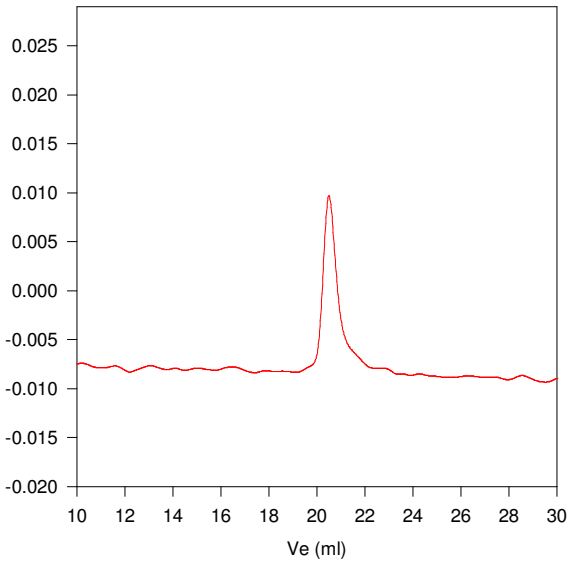
Thermal analysis of the sample was carried out using a differential scanning calorimeter (TA Q100) at a heating rate of 10°C/min.The inflection glass transition temperature (T_g) has been considered.

Solubility:

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

SEC of Polystyrene Sample # P4092-S:

P4092-S



Size exclusion chromatograph of polystyrene:

M_n=298000 M_w=342000 PI=1.15

T_g of polystyrene as function of molecular weight