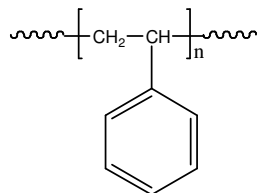


Sample Name: **Polystyrene-Broad distribution**

Sample #: **P3810-S**

Structure:



Composition:

$M_n \times 10^3$	PDI
16.0	1.6

Synthesis Procedure:

Polystyrene is obtained by living anionic polymerization of styrene in hexane in the presence of tert-butanol and nBuli as initiator. Polymerization carried out at -30 oC and the iso-fraction separated from methyl ethyl ketone (MEK) the fraction insoluble in MEK.

Characterization:

The molecular weight and polydispersity index (PDI) were 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.

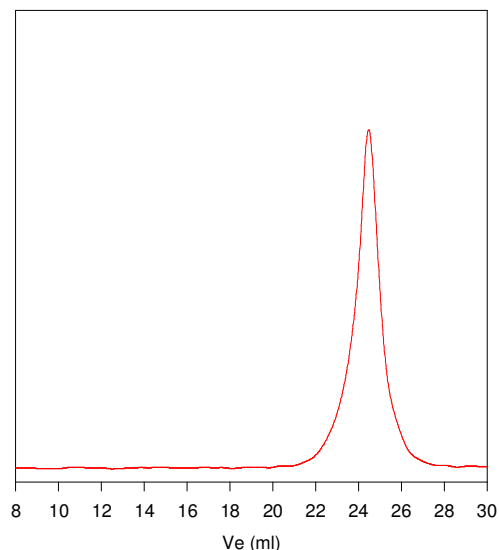
Thermal analysis of the sample was carried out using a differential scanning calorimeter (TA Q100) at a heating rate of 10°C/min. The inflection glass transition temperature (T_g) has been considered.

Solubility:

Polystyrene is soluble in DMF, THF and insoluble in MEK.

SEC of Homopolymer:

P3810-S



Size exclusion chromatography of polystyrene:

$M_n=16000$, $M_w=25500$, $PI=1.6$

DSC:

