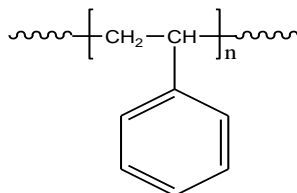


Sample Name: Polystyrene

Sample #: P19385B-S

**Structure:**

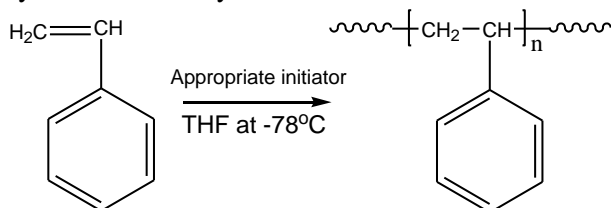


**Composition:**

Mn x 10 <sup>3</sup>	PDI
540.5	1.13

**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 DMF. SEC analysis was performed on a Varian liquid chromatograph equipped with refractive and light scattering detectors. Three SEC columns from Supelco (G6000-4000-2000 HXL) were used with triple detectors from Viscotek Co.

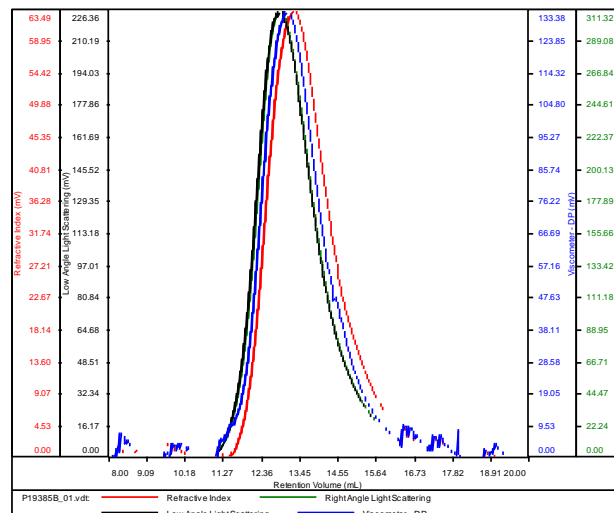
**Solubility:**

Polystyrene is soluble in DMF, THF, toluene and CHCl<sub>3</sub>. It precipitates from methanol, ethanol, water and hexanes.

**SEC elugram of the polymer in DMF:**

P19385B

Conc	3.5152
dn/dc	0.1650
Solvent	DMF w 0.023M LiBr
Flow Rate	0.7000
Method	PS80k_2018-03-09-0000.vcm



Sample	Mn	Mw	Mp	Mw/Mn	IV
P19385B_01.vdt	540,705	609,333	585,775	1.127	0.9318