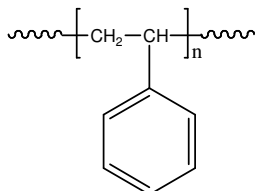


Sample Name: **Polystyrene**

Sample #: **P19102-S**

**Structure:**

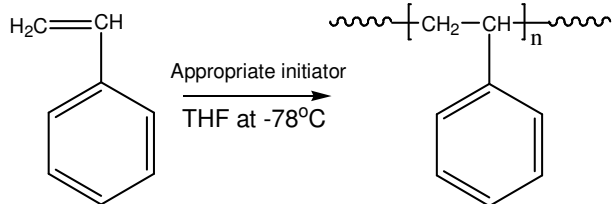


**Composition:**

Mn x 10 <sup>3</sup>	PDI
125.0	1.06

**Synthesis Procedure:**

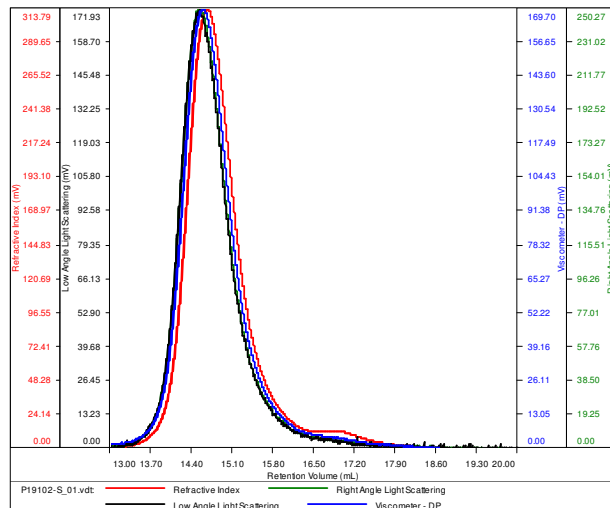
Polystyrene is obtained by living anionic polymerization of styrene as illustrated below:



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

**SAMPLE ID: P19102-S**

Conc (mg/mL)	5.9986
dn/dc (mL/g)	0.1650
Method	PS80K-NOV2014-0000.vcm
Solvent	DMF w 0.03M LiBr
Column	PSS



Sample	Mn	Mw	Mp	Mw/Mn	IV
P19102-S_01.vdt	124,847	131,764	128,646	1.055	0.3150

**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<sub>3</sub>. It precipitates from methanol, ethanol, water and hexanes.