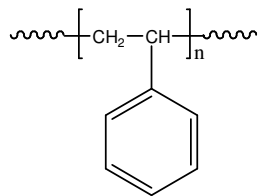


## Sample Name: Polystyrene

Sample #: P18167-S

### Structure:

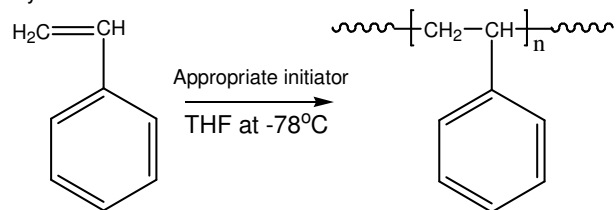


### Composition:

Mn x 10 <sup>3</sup>	PDI
217.0	1.22

### Synthesis Procedure:

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



### Characterization:

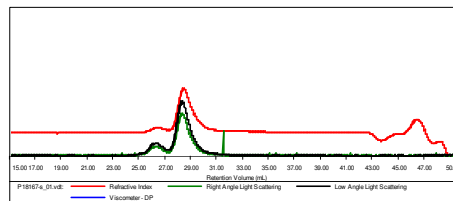
The molecular weight and polydispersity index (PDI) are obtained by size exclusion chromatography (SEC) in THF. SEC analysis was performed on a Varian liquid chromatograph equipped with refractive and UV light scattering detectors. Three SEC columns from Supelco (G6000-4000-2000 HXL) were used with triple detectors from Viscotek Co.

### Solubility:

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

Sample ID: P18167-S

Concentration (mg/mL)	1.1237
Sample dn/dc (mL/g)	0.1850
Method File	PS80K-Aug30-2013-0000.vcm
Column Set	3x PL 1113-6300
System	System 1



Sample	Mn	Mw	Mp	Mw/Mn	IV
P18167-s_01.vcl	216,807	264,711	217,800	1.221	1.2249

