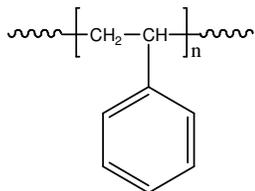


Sample Name: Polystyrene

Sample #: P18977-S

**Structure:**

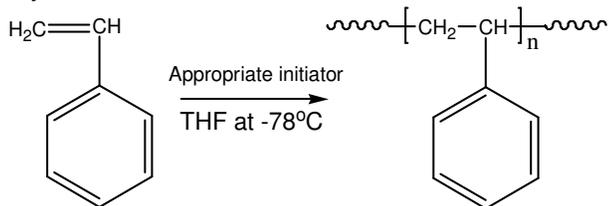


**Composition:**

$M_n \times 10^3$	PDI
1,312.0	1.17

**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.

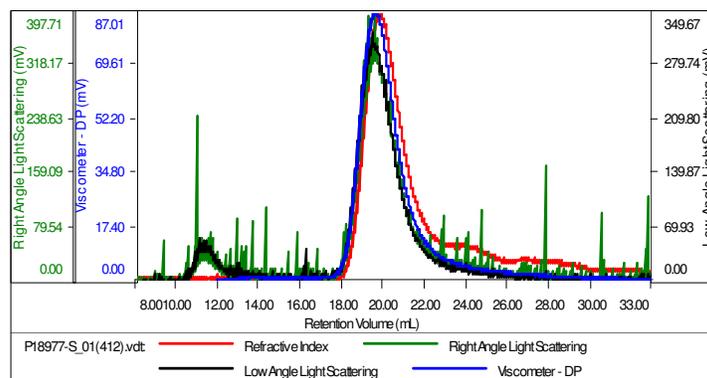
**Solubility:**

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

**SEC elugram of the polymer:**

**Sample ID:** P18977-S

Concentration (mg/mL)	2.3015
Sample dn/dc (mL/g)	0.1850
Method File	PS90K-NOV-2014-0003.vcm
Column Set	3x PL 1113-6300
Solvent	THF



Sample	MW Number Average (Da)	MW Weight Average (Da)	MW at Peak (Da)	Polydispersity	Intrinsic Viscosity (dL/g)
P18977-S_01(412).vdt	1.312 e6	1.526 e6	1.594 e6	1.163	1.9653