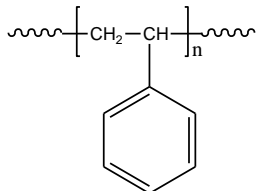


Sample Name: **Polystyrene**

Sample #: **P18976-S**

Structure:

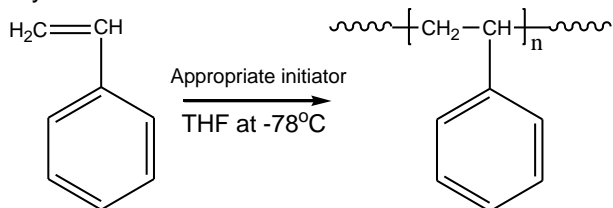


Composition:

Mn x 10 ³	PDI
121.0	1.05

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.

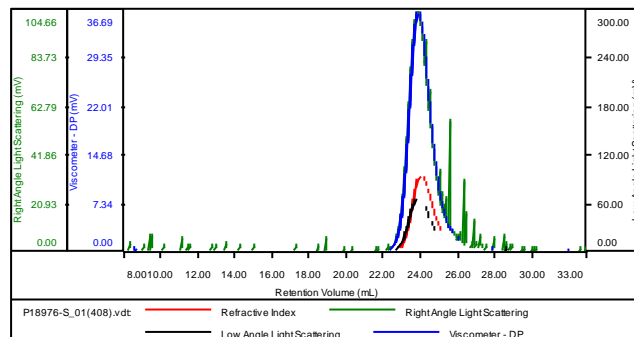
Solubility:

Polystyrene is soluble in DMF, THF, toluene and CHCl₃. It precipitates from methanol, ethanol, water and hexanes.

SEC elugram of the polymer:

Sample ID: P18976-S

Concentration (mg/mL)	3.8569
Sample dn/dc (mL/g)	0.1850
Method File	PS80K-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)
P18976-S_01(408).vdt	120,928	127,271	120,643	1.052	0.3434