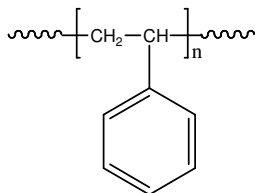


Sample Name: **Polystyrene**

Sample #: **P19078-S**

Structure:

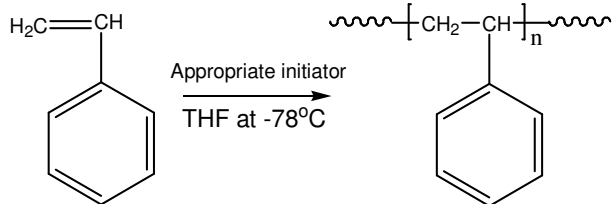


Composition:

Mn x 10 ³	PDI
205.5	1.09

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.

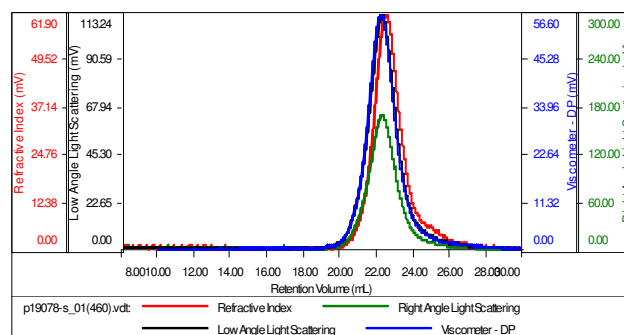
Solubility:

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

SEC elugram of the polymer:

Sample ID: P19078-S

Concentration (mg/mL)	1.7195
Sample dn/dc (mL/g)	0.1850
Method File	PS80K-Jar22.2015-0000.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)
p19078-s_01(460).vdt	205,503	224,813	213,254	1.094	1.2545