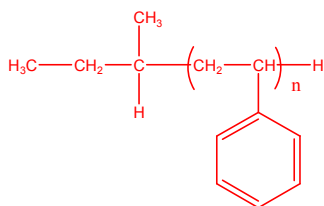


Sample Name: Polystyrene

Sample #: P40382-S

Structure:

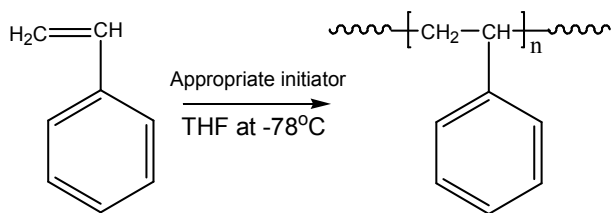


Composition:

$\text{Mn} \times 10^3$	PDI
34.0	1.02

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 DMF. 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.

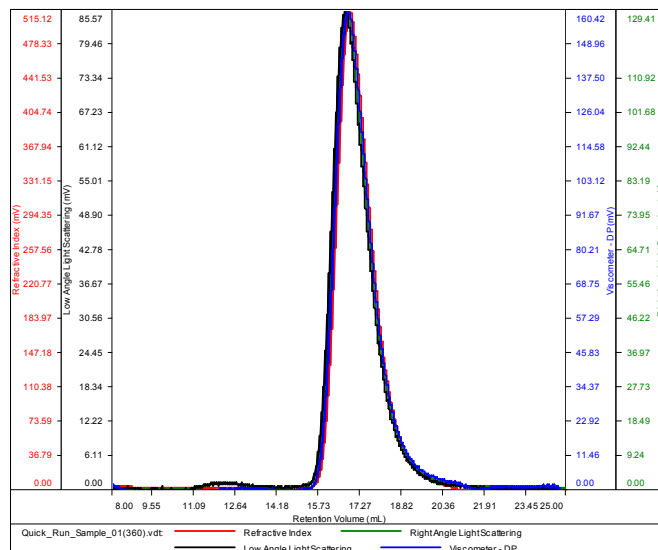
Solubility:

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

SEC elugram of the polymer in DMF:

P40382-S

Conc (mg/mL)	30.0201
dn/dc (mL/g)	0.1650
Method	PS80k_December-2016-0004.vcm
Solvent	DMF w 0.023M LiBr
Column	PSS



Sample	Mn	Mw	Mp	Mw/Mn	IV
Quick_Run_Sample_01(360).vdt	34,062	34,782	33,225	1.021	0.0942