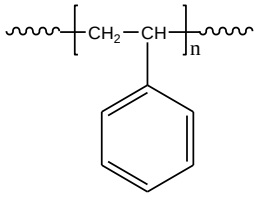
Sample Name: **Polystyrene**

Sample #: **P18995-S**

Structure:

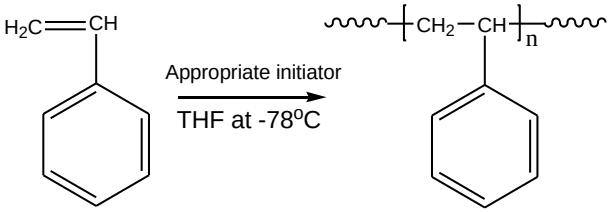


Composition:

Mn x 10^3	PDI
225.5	1.76

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.

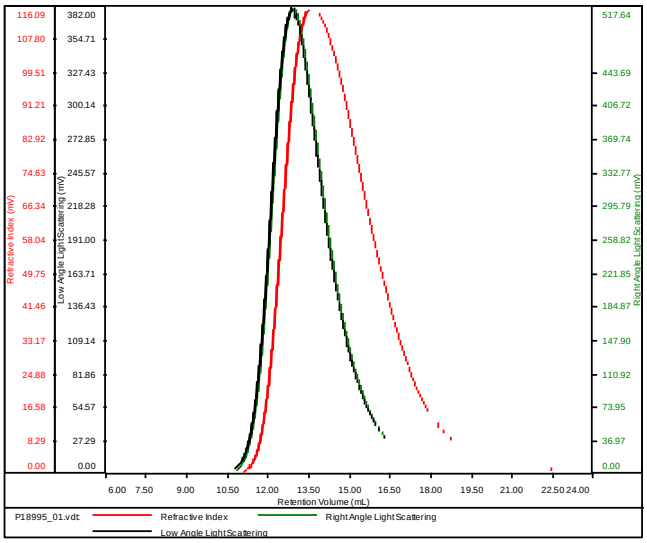
Solubility:

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

SEC elugram of the polymer:

P18995

Conc	11.1055
dn/dc	0.1650
Solvent	DMF w 0.023M LiBr
Flow Rate	0.7000
Method	PS80k_2018-03-09-0000.vcm



Sample	Mn	Mw	Mp	Mw/Mn	IV
P18995_01.vdt	225,492	398,289	482,546	1.766	0.6444