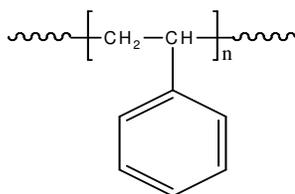


Sample Name: Polystyrene

## SEC elugram of the polymer in THF

Sample #: P19903-S

Structure:

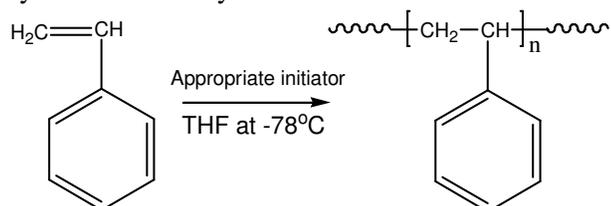


Composition:

$M_n \times 10^3$	PDI
243.0	1.09

Synthesis Procedure:

Polystyrene is obtained by living anionic polymerization of styrene as illustrated below:



Characterization:

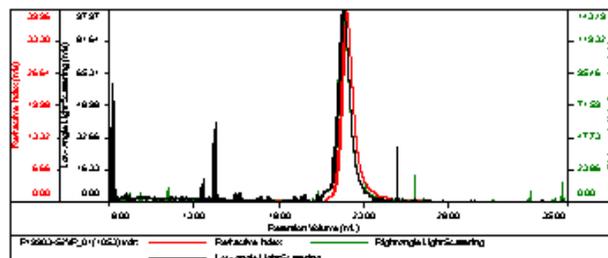
The molecular weight and polydispersity index (PDI) are obtained by size exclusion chromatography (SEC) in THF. SEC analysis was performed on a Varian liquid chromatograph equipped with refractive and UV light scattering detectors. Three SEC columns from Supelco (G6000-4000-2000 HXL) were used with triple detectors from Viscotek Co.

Solubility:

Polystyrene is soluble in DMF, THF, toluene and  $\text{CHCl}_3$ . It precipitates from methanol, ethanol, water and hexanes.

Sample ID: P19903-S

Concentration (mg/mL)	0.4776
Sample chkb (mL/g)	0.1850
Method File	P8201c_April-18-2016_0001.vcm
Column Set	3x PL 1113-6300
Solvent	THF



Sample	M <sub>n</sub> (Da)	M <sub>w</sub> (Da)	M <sub>w</sub> /M <sub>n</sub>	IV (dL/g)	M <sub>p</sub> (Da)
P19903-S _D1 (105)	242,938	264,957	1.091	1.2695	253,784