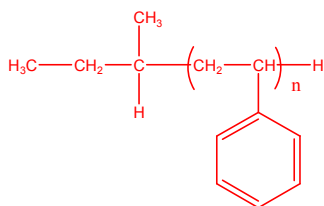


Sample Name: Polystyrene

Sample #: P40397-S

Structure:

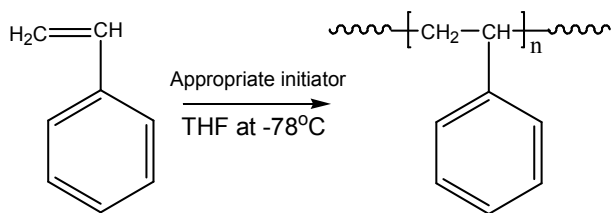


Composition:

$\text{Mn} \times 10^3$	PDI
248.0	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 DMF. SEC analysis was performed on a Varian liquid chromatography 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.

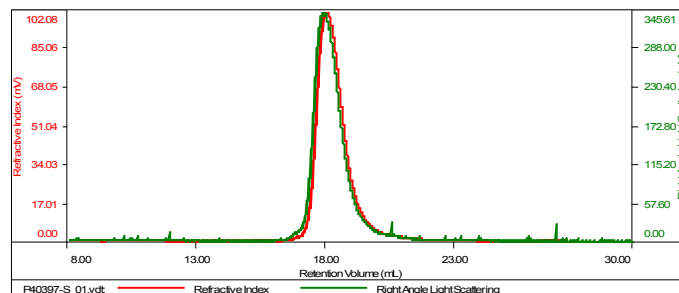
Solubility:

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:

P40397-S

Concentration (mg/mL)	1.8106
Sample dn/dc (mL/g)	0.1850
Method File	PS80K-Nb/2016-6-0000.vcm
Column Set	3x PL 1113-6300
Solvent	THF



Sample	Mn (Da)	Mw (Da)	Mw/Mn	IV (dL/g)	Mp (Da)
P40397-S_01.vdt	248,051	261,499	1.054	1.4625	251,576