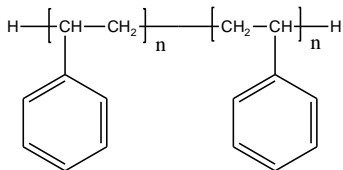


Sample Name: Polystyrene

Sample #: P40565-S

Structure:

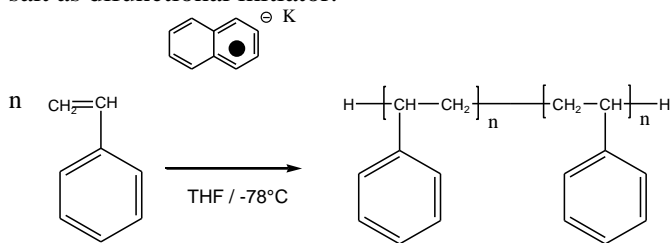


Composition:

Mn x 10 ³	PDI
439.0	1.05

Synthesis Procedure:

Polystyrene is obtained by living anionic polymerization of styrene using Naphthalene Potassium salt as difunctional initiator.



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 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.

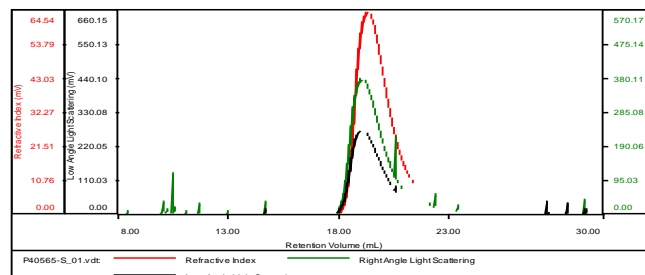
Solubility:

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

SEC elugram of the polymer in THF:

P40565-S

Concentration (mg/mL)	1.0553
Sample dn/dc (mL/g)	0.1850
Method File	PS80K-Feb2017-0000.vcm
Column Set	3x PL 1113-6300
Solvent	THF



Sample	Mn (Da)	Mw (Da)	Mw/Mn	IV (dL/g)	Mp (Da)
P40565-S_01.vdt	439,240	460,779	1.049	2.4160	470,586