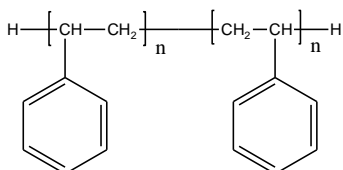


Sample Name: Polystyrene

Sample #: P40566A-S

Structure:

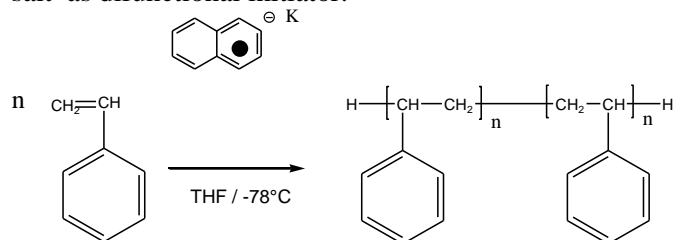


Composition:

Mn x 10 ³	PDI
611.0	1.10

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.

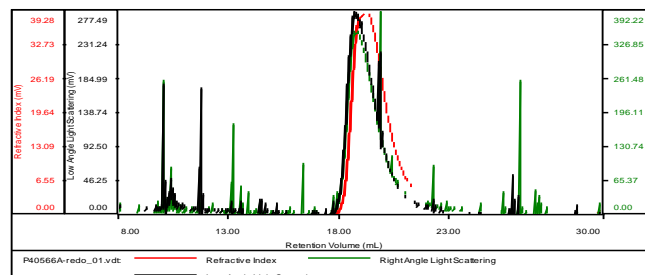
Solubility:

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

SEC elugram of the polymer in THF:

P40566A-S

Concentration (mg/mL)	0.6706
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)
P40566A-redo_01.vdt	611,089	672,092	1.100	4.0126	691,352