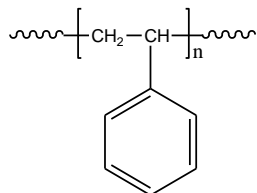


Sample Name: Polystyrene-Broad Distribution

Sample #: P18256-S

Structure:



Composition:

Mn x 10 ³	PDI
875.0	1.2

Synthesis Procedure:

Polystyrene is obtained by free radical polymerization of styrene.

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.

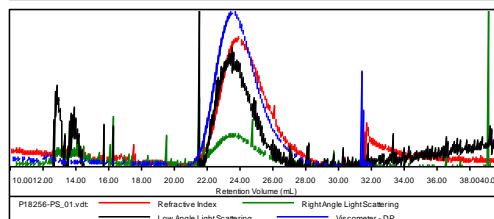
Solubility:

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

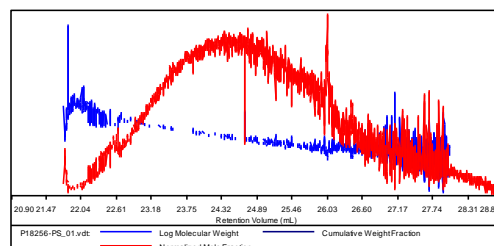
SEC of Homopolymer

Sample ID: P18256-S

Concentration (mg/mL)	0.5615
Sample dn/dc (mL/g)	0.1850
Method File	PS80K-OCT-2013-0003.vcm
Column Set	3x PL 1113-6300
System	System 1



Sample	Mn	Mw	Mp	Mw/Mn	IV
P18256-PS_01.vdt	874,828	1.058 e 6	1.073 e 6	1.209	3.6372



T_g of polystyrene as function of molecular weight

