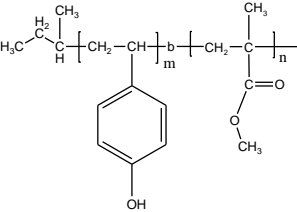


Sample Name:
Poly(4-Hydroxy styrene-b-Methylmethacrylate)

Sample #: P18294A-4OHS MMA

Structure:



Composition:

Mn x 10 ³ 4MeOS-b-MMA	Mw/Mn (PDI)
22.0-b-74.0	1.15

Synthesis Procedure:

Poly(4- methoxy styrene-b-MMA) is prepared by living anionic polymerization by sequence addition of 4-methoxyl styrene followed by methylmethacrylate. The obtained polymer converted to Poly (4 Hydroxy styrene-b-MMA) di block copolymer.

Characterization Block was analyzed by size exclusion chromatography (SEC) to obtain the molecular weight and polydispersity index (PDI). The final block copolymer composition was calculated from ¹H-NMR spectroscopy by comparing the peak area of the 4 methoxy styrene protons at 6.3-7.2 ppm with the peak area of 4-methoxy styrene at 3.7ppm and MMA –Methyl ester at 3.6 ppm .

Solubility: Polymer is soluble in THF, acetone

Figure:¹H NMR spectrum of the sample

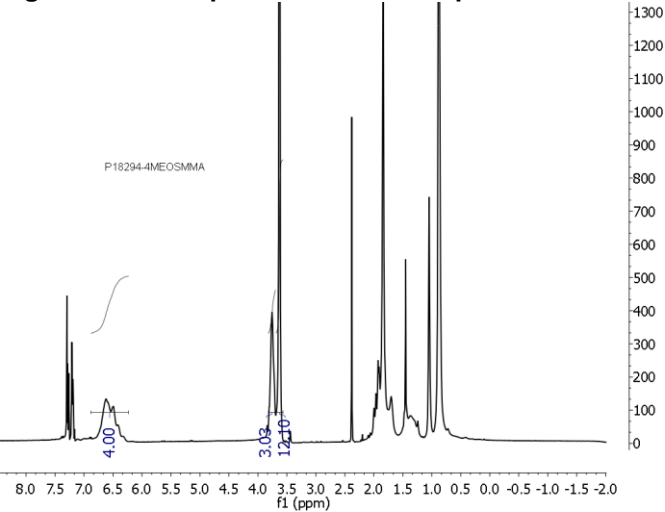
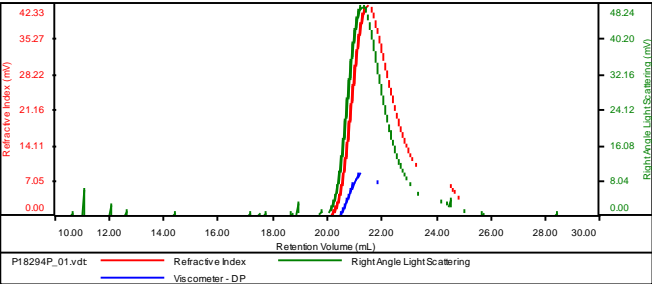


Figure: SEC profile of the block copolymer

Sample ID: P18294-4MeOS MMA

Concentration (mg/mL)	3.1640
Sample dn/dc (mL/g)	0.1170
Method File	PS80K-NOV/25-2013-0002.vcm
Column Set	3x PL 1113-6300
System	System 1



Sample	Mn	Mw	Mp	Mw/Mn	IV
P18294P_01.vdt	94,674	109,115	124,085	1.153	0.4003

