Sample Name:

Poly(4-Methoxy styrene-b-tert.Butylacrylate)

Sample #: P18304-4MeOStBuA

Structure:

$$\begin{array}{c|c} & & & & H_2 \\ H_2 & & & & \\ C &$$

Composition:

Mn x 10 ³ 4MeOS-b-tBuA	Mw/Mn (PDI)		
27.0-b-70.0	1.2		

Synthesis Procedure:

Poly(4- methoxy styrene-b-tBuA) is prepared by living anionic polymerization by sequence addition of 4-methoxyl styrene followed by tert.butylacrylate.

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 tert.butyl at 1.4 ppm .

Solubility: Polymer is soluble in THF, acetone Figure: ¹H NMR spectrum of the sample

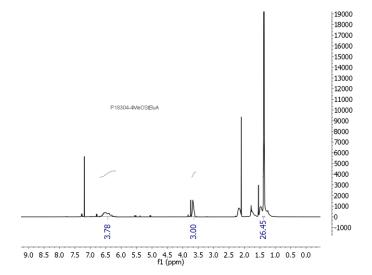
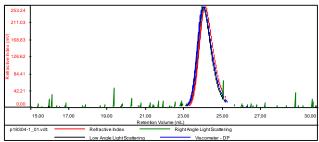


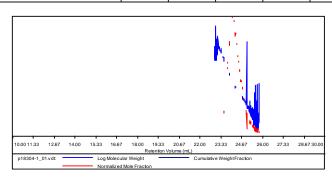
Figure: SEC profile of the block copolymer

Sample ID: P18304-4MeOS

Concentration (mg/mL)	4.7269
Sample dn/dc (mL/g)	0.1850
Method File	PS80K-NOV-2013-0001.vcm
Column Set	3x PL 1113-6300
System	System 1

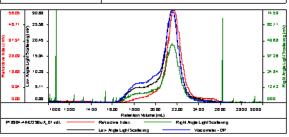


	Sample	Mn	Mw	Мр	Mw/Mn	IV
Ī	p18304-1_01.vdt	26,884	28,686	29,012	1.067	0.2495



Sample ID: P18304-4MoStBuA

Concentration (mg/m L)	5.1773			
Sample dri/dc (m L/g)	0.1120			
Method Rie	PS80K-Jax05-2014-0001.ucm			
Column Set	3x PL 1113-6300			
S ye tem	System 1			
20.53			M 59	



Sample	Mn	M o	Мр	Mw/Mn	IV
P18304-4 MEOSt8 (A_01 udt	96,839	113,959	95,281	1.177	0.7961

