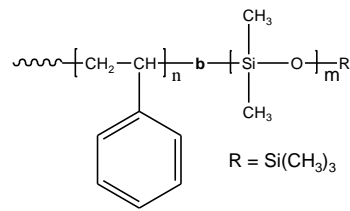


Sample Name:
Poly(styrene-b-dimethyl siloxane)

Sample #: P40624-SDMS (R=(Si(CH3)3)

Structure:



Composition:

Mn × 10 ³ S-b-DMS	Mw/Mn (PDI)
16.0 -b-17.0	1.10

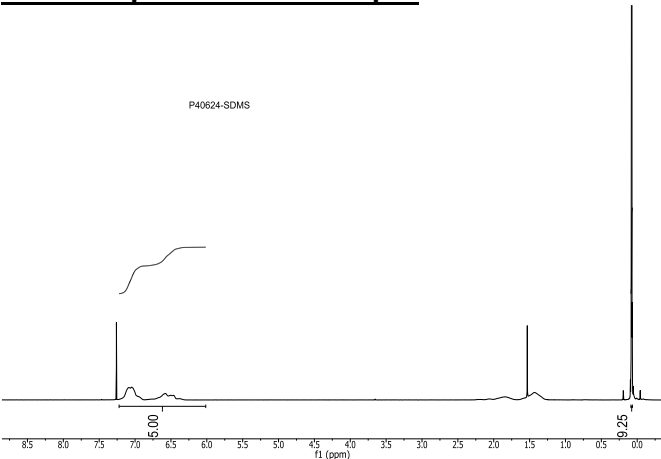
Synthesis Procedure:

Poly(styrene-b-dimethyl siloxane) is prepared by living anionic polymerization with sequence addition of styrene followed by hexamethyl cyclotrisiloxane. For the details please see the references.

Characterization:

An aliquot of the polystyrene block was terminated before addition of hexamethyl cyclotrisiloxane and 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 styrene protons at 6.3-7.2 ppm with the peak area of siloxane protons near 0.13 ppm. Block copolymer PDI is determined by SEC.

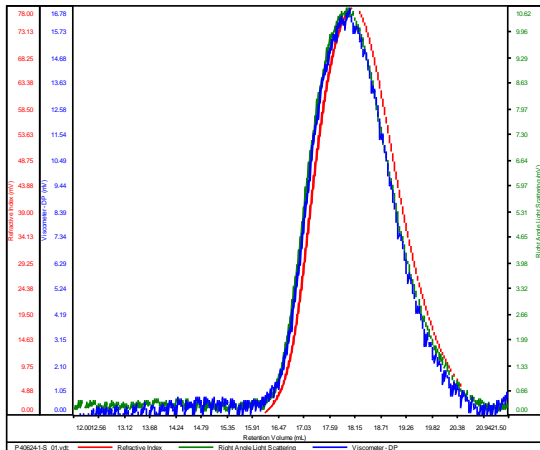
¹H NMR spectrum of the sample:



SEC eluhram of the first block polystyrene:

P40624-1-S

Conc	7.4130
dn/dc	0.1650
Solvent	DMF w 0.023M LiBr
Flow Rate	0.7000
Method	PS80k-May2017-0000.vcm

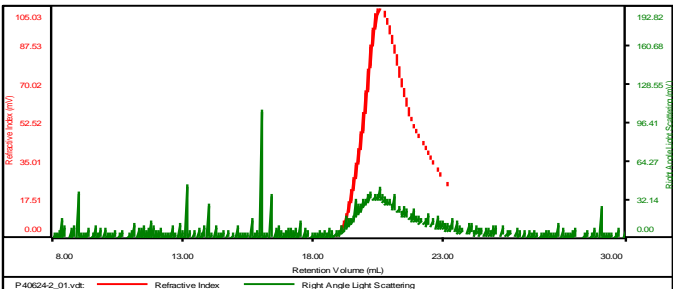


Sample	Mn	Mw	Mp	Mw/Mn	IV
P40624-1-S_01.vdt	15,791	16,168	15,844	1.024	0.0525

SEC elugram of the diblock polymer:

P40624-SDMS

Concentration (mg/mL)	5.9172
Sample dn/dc (mL/g)	0.0700
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)
P40624-2_01.vdt	31,780	34,999	1.101	0.5594	27,372

