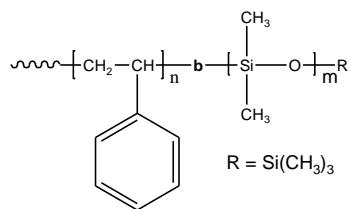


Sample Name:

Poly(styrene-b-dimethyl siloxane)

Sample #: **P40764-SDMS (R=(Si(CH₃)₃))**

Structure:



Composition:

$M_n \times 10^3$ S-b-DMS	Mw/Mn (PDI)
52.0 -b- 32.0	1.12

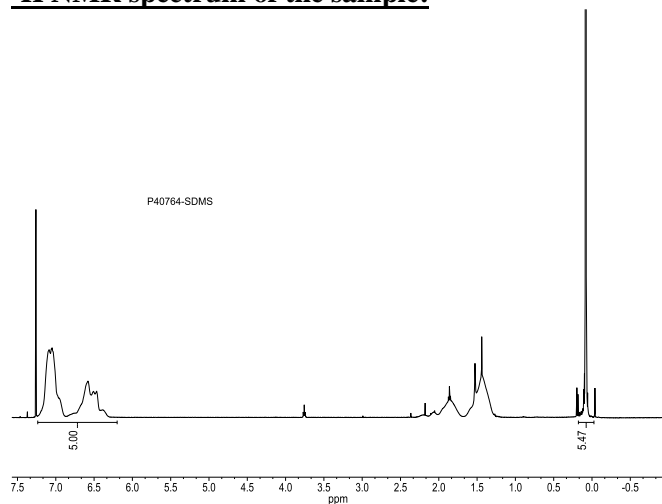
Synthesis Procedure:

Poly(styrene-b-dimethyl siloxane) is prepared by anionic polymerization process.

Characterization:

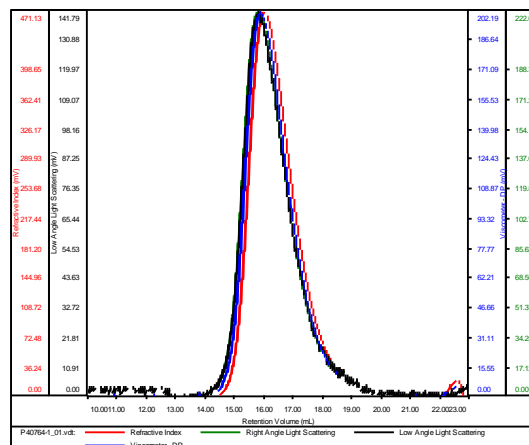
The molecular weight and polydispersity index (PDI) of the polymer are obtained by size exclusion chromatography (SEC) and ¹H NMR.

¹H NMR spectrum of the sample:



SEC eluhram of the first block polystyrene:

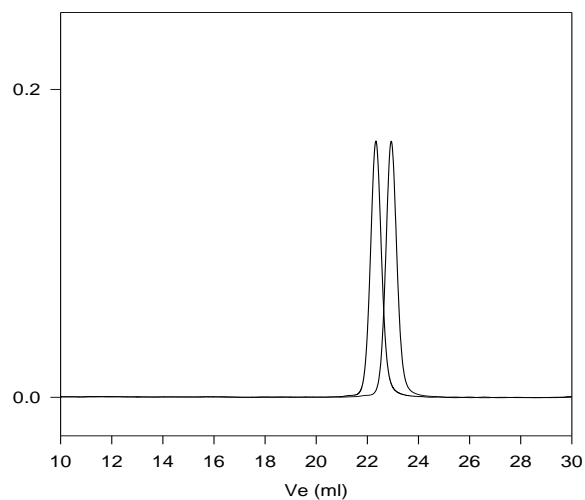
P40764-1	
Conc	38.4716
dn/dc	0.1650
Solvent	DMF w 0.023M LiBr
Flow Rate	0.7000
Method	PS-80K_2017-September-22-0000.vcm



Sample	Mn	Mw	Mp	Mw/Mn	IV
P40764-1_01.vdt	52,871	56,036	53,254	1.060	0.1084

SEC elugram of the diblock polymer:

P40764-SDMS



Size exclusion chromatography of poly(styrene-b-dimethylsiloxane)

—— Polystyrene, $M_n=52,000$, $M_w=56,000$, $M_w/M_n=1.08$

Poly(styrene-b-dimethylsiloxane)

M_n : PS(52,000)-b-PDMS(32,000) $M_w/M_n=1.12$