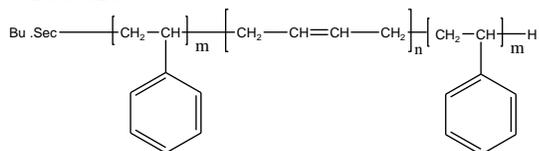


Sample Name:**Poly(Styrene-b-butadiene-b-styrene)****Poly butadiene rich in 1,4 microstructure****Sample #: P127-SBdS****Structure:****Composition:**

Mn x 10 ³ (S-b-Bd-b-S)	PDI
19.2-b-41-b-20.5	1.04

Synthesis Procedure:

Poly(styrene-b-butadiene-b-styrene) is prepared by living anionic polymerization with sequence addition of styrene followed by butadiene and then styrene again.

Characterization:

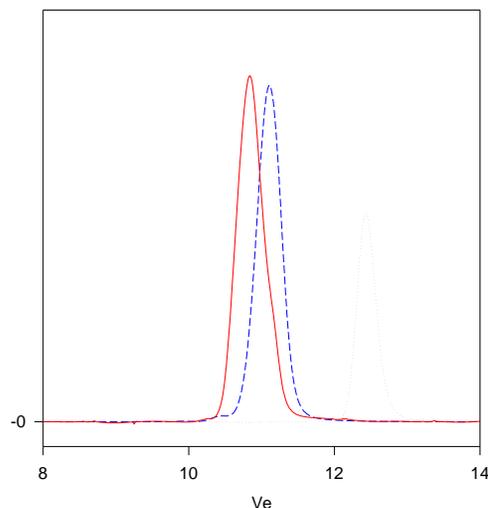
The molecular weight and polydispersity index of this polymer were determined by size exclusion chromatography (SEC) using a Varian liquid chromatograph equipped with a UV and refractive index detector.

Thermal analysis

Thermal analysis of the samples was carried out on a TA Q100 differential scanning calorimeter at a heating rate of 20°C/min. The midpoint of the slope change of the heat flow plot of the second heating scan was considered as the glass transition temperature (T_g).

Solubility:

Polymer is soluble in THF, toluene and CHCl₃. It precipitates from methanol, ethanol, water and hexane (depending on the compositions).

SEC of Sample:**P127-SBS**

Size Exclusion Chromatography of:

— P127-St, the first PS block, M_n=19200, PI=1.03

- - - P127-SB, the diblock PS(19200)-b-PB(41000), PI=1.05

— P127-SBS, the triblock PS(19200)-b-PB(41000)-b-PS(20500), PI=1.04