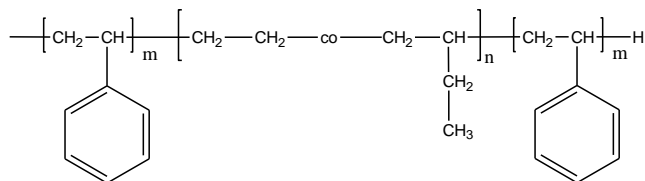


Sample Name:

Poly(Styrene-b-ethylene /butylene-b-Styrene)
Obtained from Hydrogenation of SBdS
 triblock copolymer where Poly butadiene rich
 in 1,4 microstructure

Sample #: P5999A-SEBS**Structure:****Composition:**

Mn x 10 ³ (S-b-Bd-S)	PDI
15.0-b-73.0-b-15.0	1.19

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. Polymerization carried out in THF. The obtained polymer hydrogenated in presence of Pd/CaCo₃/Wilkinson catalyst. Purification after the Hydrogenation:

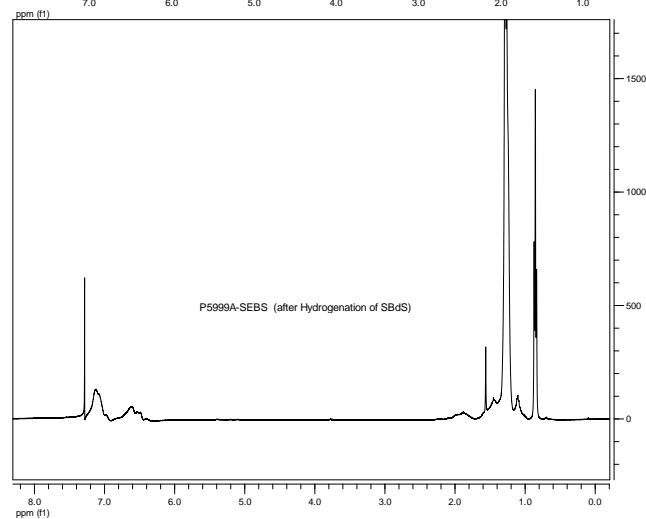
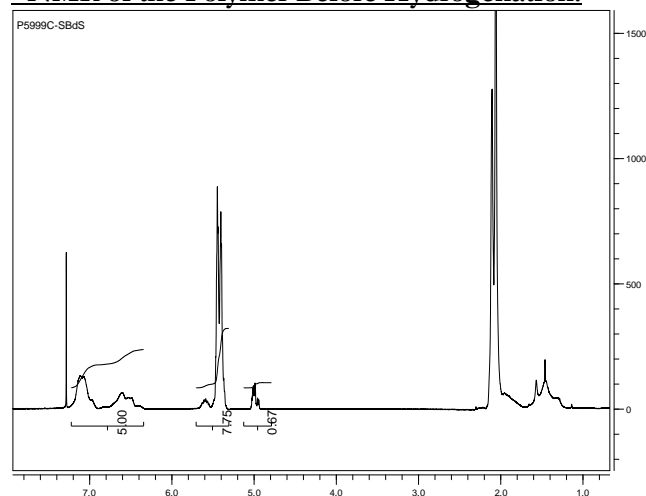
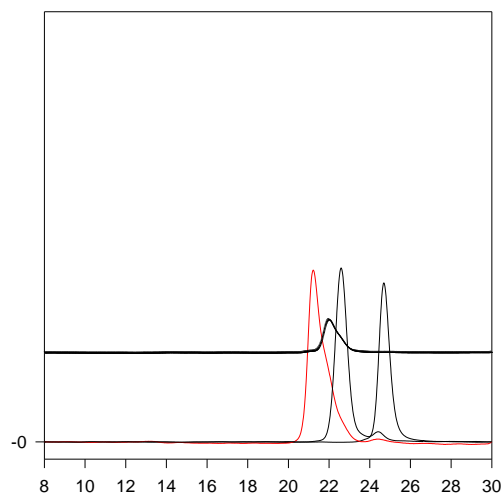
The obtained polymer was filter to remove the catalyst.

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.

Solubility:

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

¹H NMR of the Polymer Before Hydrogenation:**SEC of Sample:****SBdS Precursor for P5999A-SBES**

Size Exclusion Chromatography of:

— PS block, M_n=15000, M_w: 15,600 PI=1.05

--- SBdS, the diblock PS(15000)-b-PBd(35,000), PI=1.07

— SBdS, triblock PS(15000)-b-PBd(70,000)-b-PS(15000), PI=1.19

After Hydrogenation: 15000-b-73000-b-15000 PI: 1.19

The Elution count after Hydrogenation was found lower than its SBdS triblock copolymer