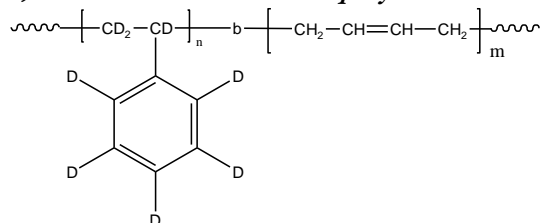


Sample Name: Deuterated (d8)Poly(styrene-b-Protonated-butadiene)

Sample #: P1624-dPSBd

1,4-rich microstructure for polybutadiene block:



Composition:

Mn x 10 ³ dPS-b-Bd	Mw/Mn (PDI)
39.0-b-11.0	1.04

Synthesis Procedure:

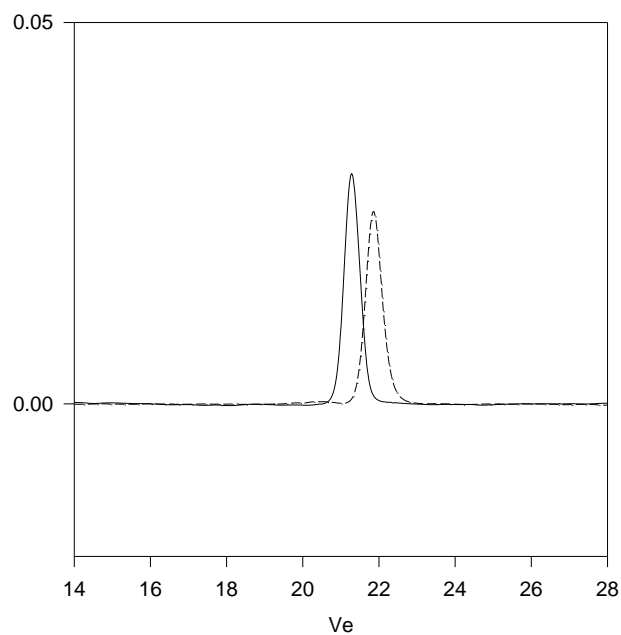
Deuterated Poly(styrene-b-butadiene) is prepared by living anionic polymerization in non-polar solvent with sequence addition of deuterated styrene followed by butadiene.

Characterization:

An aliquot of the anionic polystyrene block was terminated before addition of isoprene and analyzed by size exclusion chromatography (SEC) to obtain the molecular weight and polydispersity index (PDI). The block copolymer composition was then calculated from

SEC of Sample of the block copolymer:

P1624-dPSBd



Size Exclusion Chromatography :

----- Polystyrene, M_n=39000, M_w=40000, M_w/M_n=1.03

———— Block Copolymer PdS(39000)-b-PB(11000), M_w/M_n=1.04