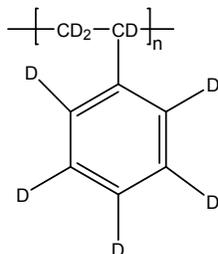


Sample Name: Deuterated Polystyrene (d₈)

Sample #: P11355-dPS

Structure:

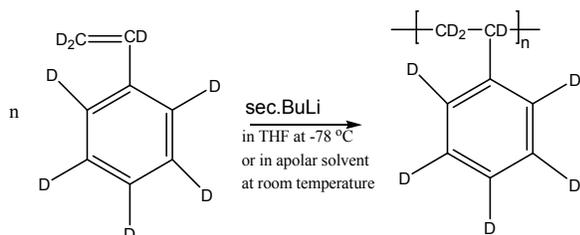


Composition:

Mn x 10 ³	PDI
195.0	1.17

Synthesis Procedure:

Deuterated polystyrene-d₈ is obtained by living anionic polymerization of styrene-d₈ as illustrated below:



Characterization:

The molecular weight and polydispersity index (PDI) are obtained by size exclusion chromatography (SEC) in THF. SEC analysis was performed on a Varian liquid chromatograph equipped with refractive and UV light scattering detectors from Viscotek Co. Three SEC columns from Supelco (G6000-4000-2000 HXL) were used.

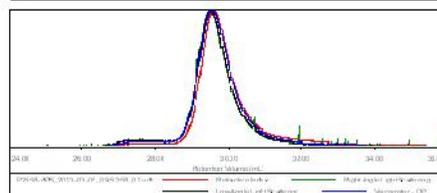
Solubility:

Deuterated polystyrene-d₈ is soluble in DMF, THF, toluene and CHCl₃. It precipitates from methanol, ethanol, water and hexanes.

SEC of Homopolymer:

Sample # P11355-dPE

Concentration (mg/mL)	2.7204
Sample dn/dc (mL/g)	0.1170
Method File	PS80K-Mar-2013-0002.ram
Column Set	3x PL1113-6000
System	System 1



Sample	Mn (Da)	Mw (Da)	Mp (Da)	Mw/Mn	IV (dL/g)
fPS_2013-03-05_0853_#8_01.vdt	195,339	228,346	234,990	1.169	1.0246

