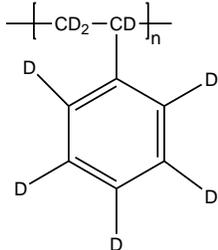


Sample Name: Deuterated Polystyrene (d₈)

Sample #: P18390-dPS

Structure:

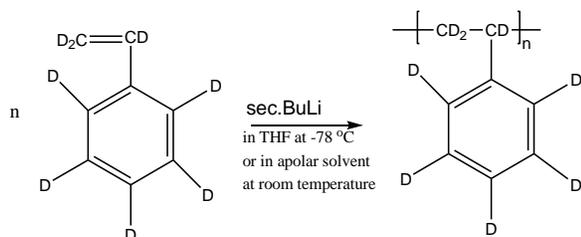


Composition:

Mn x 10 ³	PDI
61.5	1.02

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.

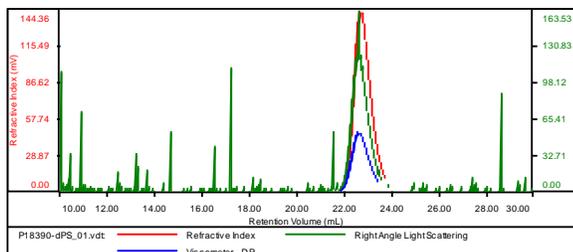
Solubility:

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

SEC of Homopolymer:

Sample ID: P18390-dPS

Concentration (mg/mL)	4.1026
Sample dn/dc (mL/g)	0.1700
Method File	PS80K-Jan05-2014-0001.vcm
Column Set	3x PL 1113-6300
System	System 1



Sample	Mn	Mw	Mp	Mw/Mn	IV
P18390-dPS_01.vdt	61,563	62,508	63,502	1.015	0.2768

