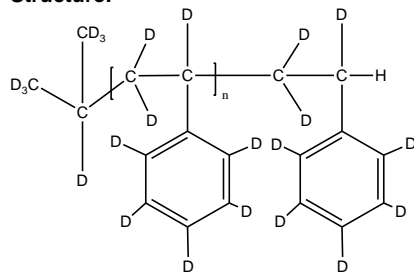


Sample Name: Deuterated Polystyrene (d₈)
Initiated by d7 Isopropyl lithium
Sample #: P18520-dPS

Structure:



Composition:

Mn x 10 ³	PDI
11.0	1.12

Synthesis Procedure:

Deuterated polystyrene-d₈ is obtained by living anionic polymerization of styrene-d₈ using d₇ isopropyl lithium initiator.

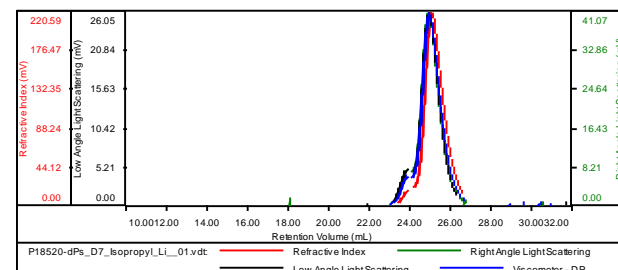
Characterization:

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.

Concentration (mg/mL)	3.2898
Sample dn/dc (mL/g)	0.1850
Method File	PS80K-Feb25-2014-0000.vcm
Column Set	3x PL 1113-6300
System	System 1



Sample	Mn	Mw	Mp	Mw/Mn	IV
P18520-dPs_D7_Isopropyl_Li_01.vdt	10,959	12,216	11,990	1.115	0.2484

SEC of Homopolymer: