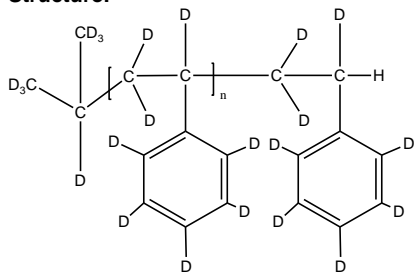


Sample Name: Deuterated Polystyrene (d₈)
Initiated by d7 Isopropyl lithium
Sample #: P18540-dPS

Structure:



Composition:

Mn x 10 ³	PDI
21.0	1.6

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.

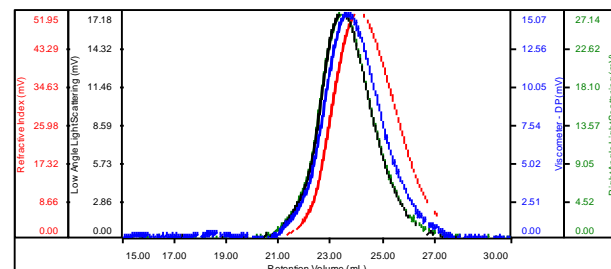
Solubility:

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

SEC of Homopolymer:

Sample ID: P18540-DPS

Concentration (mg/mL)	2.1296
Sample dn/dc (mL/g)	0.1700
Method File	PS80K-Feb25-2014-0000.vcm
Column Set	3x PL 1113-6300
System	System 1



Sample	Mn	Mw	Mp	Mw/Mn	IV
P18538-dps_01.vdt	20,986	32,897	31,342	1.568	0.3723

