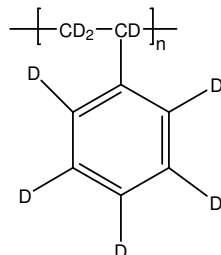


Sample Name: **Deuterated Polystyrene (d₈)**

Sample #: **P19879-dPS**

Structure:

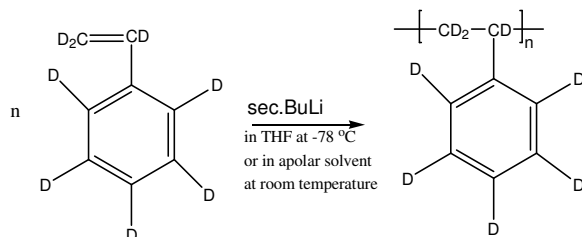


Composition:

Mn x 10 ³	PDI
220.5	1.38

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 or in DMF. 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.

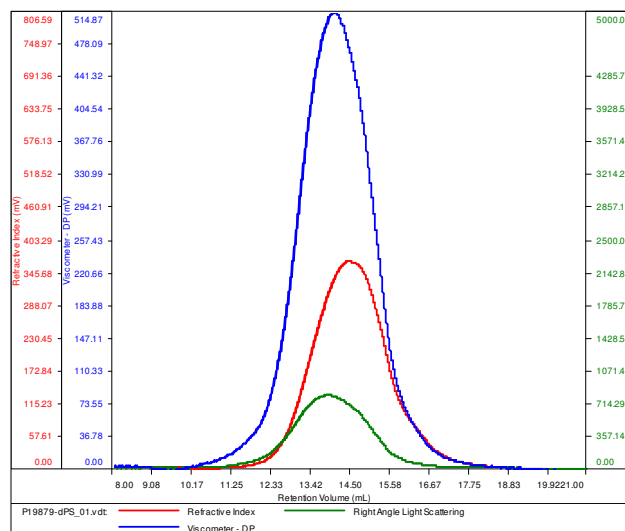
Solubility:

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

SEC elugram of Homopolymer:

P19879-dPS

Conc (mg/mL)	20.0509
dn/dc (mL/g)	0.1650
Method	ps80k-May2016-0002.vcm
Solvent	DMF w 0.023M LiBr
Column	PSS



Sample	Mn	Mw	Mp	Mw/Mn	IV
P19879-dPS_01.vdt	220,555	306,292	256,698	1.389	0.6707