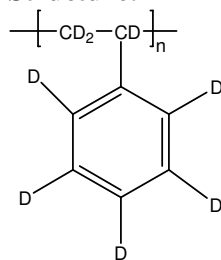


Sample Name: Deuterated Polystyrene (d<sub>8</sub>)

SEC elugram of Homopolymer:

Sample #: P19874-dPS

**Structure:**

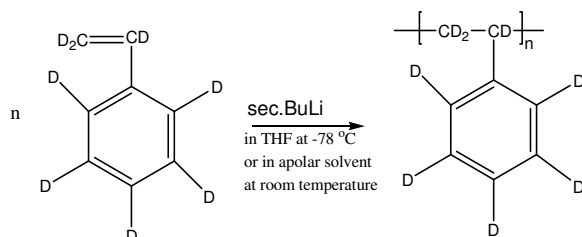


**Composition:**

Mn x 10 <sup>3</sup>	PDI
441.0	1.6

**Synthesis Procedure:**

Deuterated polystyrene-d<sub>8</sub> is obtained by living anionic polymerization of styrene-d<sub>8</sub> as illustrated below:



**Characterization:**

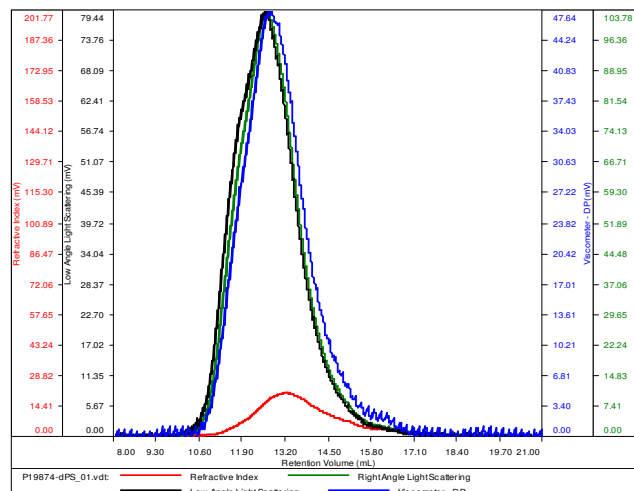
The molecular weight and polydispersity index (PDI) are obtained by size exclusion chromatography (SEC) in THF or in DMF. SEC analysis was performed on a Varian liquid chromatograph equipped with refractive and UV light scattering detectors from Viscotek Co. Three SEC columns from Supelco (G6000-4000-2000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

**Solubility:**

Deuterated polystyrene-d<sub>8</sub> is soluble in DMF, THF, toluene and CHCl<sub>3</sub>. It precipitates from methanol, ethanol, water and hexanes.

**P19874-dPS**

Conc (mg/mL)	1.0856
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
P19874-dPS_01.vdt	440,954	711,976	606,860	1.615	1.0775