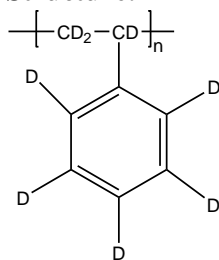


Sample Name: Deuterated Polystyrene (d<sub>8</sub>)

Sample #: P19911B-dPS

**Structure:**

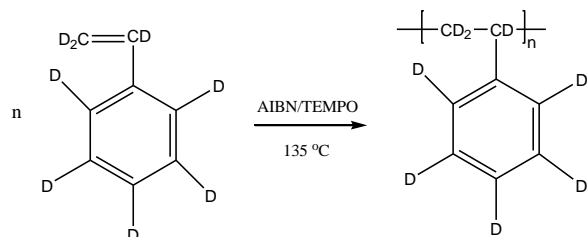


**Composition:**

Mn x 10 <sup>3</sup>	PDI
240.0	1.9

**Synthesis Procedure:**

Deuterated polystyrene-d<sub>8</sub> is obtained by controlled radical 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. SEC analysis was performed on a Varian liquid chromatograph equipped with refractive and light scattering detectors. Three SEC columns from Supelco (G6000-4000-2000 HXL) were used with triple detectors from Viscotek Co.

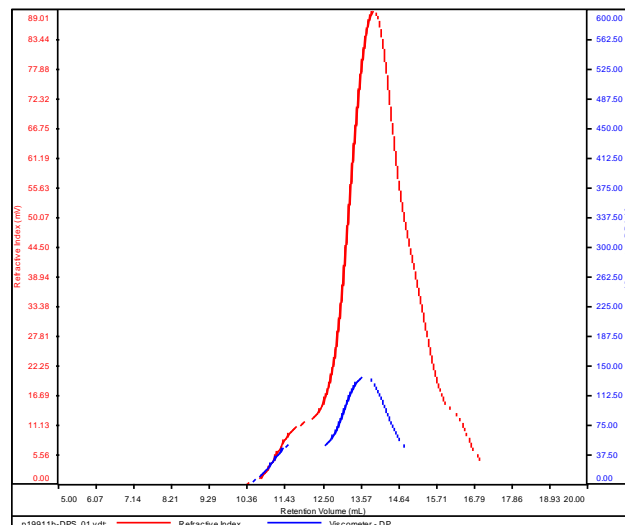
**Solubility:**

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.

**SEC elugram of Homopolymer:**

**P19911B-dPS**

Conc (mg/mL)	4.5237
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
p19911b-DPS_01.vdt	240,299	471,804	339,635	1.963	0.7898