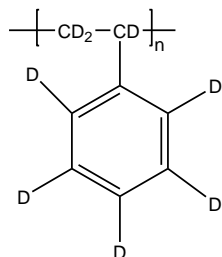


Sample Name: Deuterated Polystyrene-d<sub>8</sub>

Sample #: P18460-dPS

**Structure:**

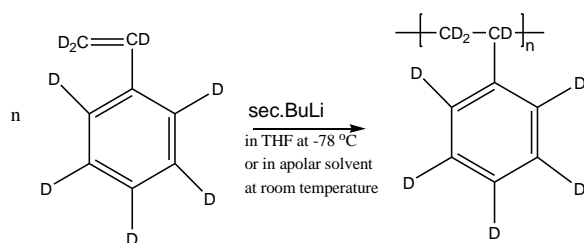


**Composition:**

Mn x 10 <sup>3</sup>	15.8
Mw x 10 <sup>3</sup>	16.4
PDI	1.04

**Synthesis Procedure:**

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



**Characterization:**

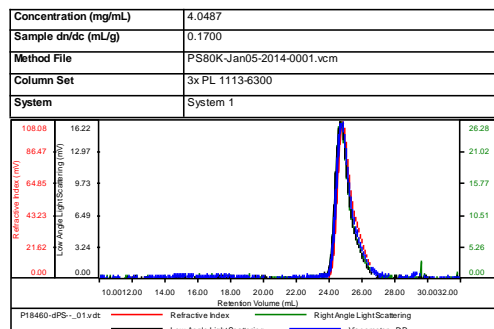
The molecular weight and polydispersity index (PDI) are obtained by size exclusion chromatography (SEC) in THF. SEC analysis was performed on a Varian liquid chromatograph equipped with refractive and light scattering detectors. Three SEC columns from Supelco (G6000-4000-2000 HXL) were used with triple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

Sample ID: P18460-DPS



Sample	Mn	Mw	Mp	Mw/Mn	IV
P18460-dPS-01.vdt	15,763	16,379	17,380	1.039	0.1104

