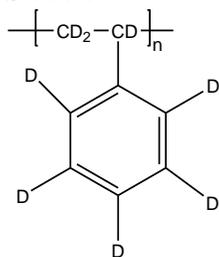


Sample Name: **Deuterated Polystyrene (d<sub>8</sub>)**

Sample #: **P41267-dPS**

**Structure:**

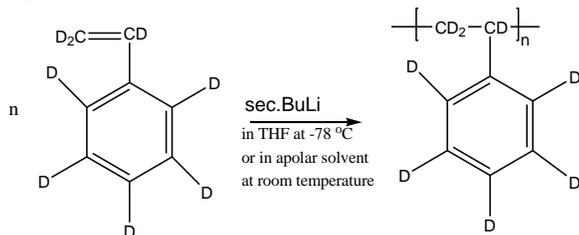


**Composition:**

Mn x 10 <sup>3</sup>	PDI
2.8	1.28

**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. 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.

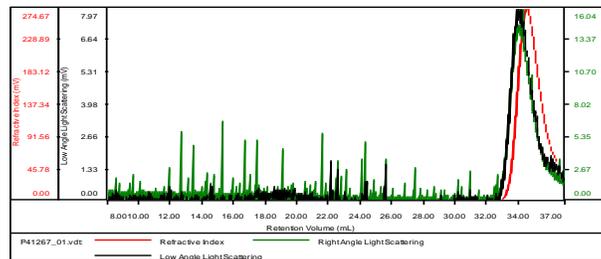
**Solubility:**

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.

**SEC of Homopolymer:**

**P41267-dPS**

Concentration (mg/mL)	6.7300
Sample dn/dc (mL/g)	0.1850
Method File	PS99K-May-2018-0000.vcm
Column Set	3x PL 1113-6300
Solvent	THF



Sample	Mn (Da)	Mw (Da)	Mw/Mn	IV (dL/g)	Mp (Da)
P41267_01.vdt	2,739	3,504	1.279	0.0795	2,903