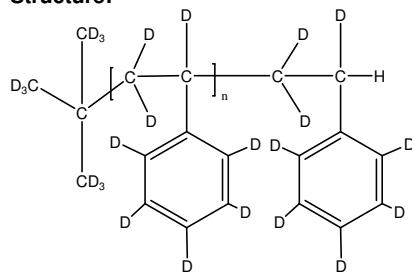


Sample Name: **Deuterated Polystyrene (d<sub>8</sub>)**  
Initiated by d<sub>9</sub> tert.butyl lithium  
Sample #: **P18791-dPS**

**Structure:**



**Composition:**

Mn x 10 <sup>3</sup>	PDI
6.0	1.08

**Synthesis Procedure:**

Deuterated polystyrene-d<sub>8</sub> is obtained by living anionic polymerization of styrene-d<sub>8</sub> using d<sub>9</sub> tert.butyl lithium initiator

**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.

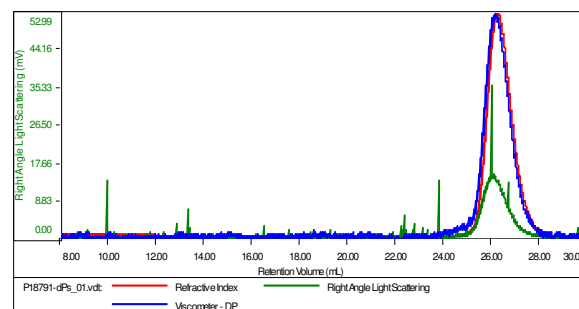
**Solubility:**

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:**

**Sample ID: P18791-dPS**

Concentration (mg/mL)	0.7677
Sample dwtc (mL/g)	0.1850
Method File	PS80K-July11-2014-0000.vcm
ColumnSet	3x PL 1113-6300
Solvent	THF



Sample	Mn	Mw	Mp	Mw/Mn	IV
P18791-dPs_01.vdt	6,048	6,549	6,106	1.083	0.4687

