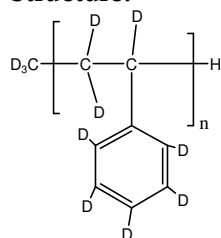


Sample Name: Deuterated Polystyrene (d<sub>8</sub>)

Sample #: P18503-dPS

**Structure:**



**Composition:**

Mn x 10 <sup>3</sup>	PDI
26.5	1.38

**Synthesis Procedure:**

Deuterated polystyrene-d<sub>8</sub> is obtained by living anionic polymerization of styrene-d<sub>8</sub> using deuterated CD<sub>3</sub>Li 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.

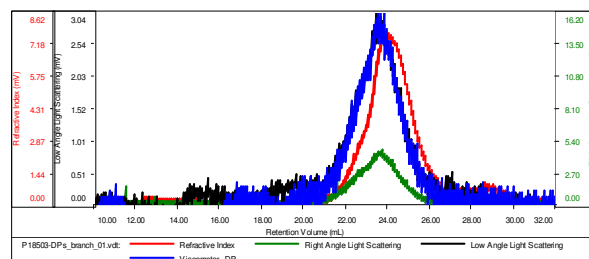
**Solubility:**

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:** P18503 dPs branch

Concentration (mg/mL)	0.2963
Sample dn/dc (mL/g)	0.1850
Method File	PS80K-Feb10-2014-0000.vcm
Column Set	3x PL 1113-6300
System	System 1



Sample	Mn	Mw	Mp	Mw/Mn	IV
P18503-DPs_branch_01.vdt	26,554	37,004	34,833	1.394	0.4279

