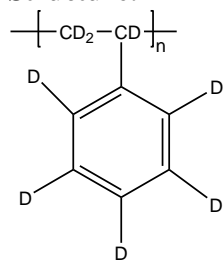


**Sample Name: Deuterated Polystyrene (d<sub>8</sub>)**

**Sample #: P19882-dPS**

**Structure:**

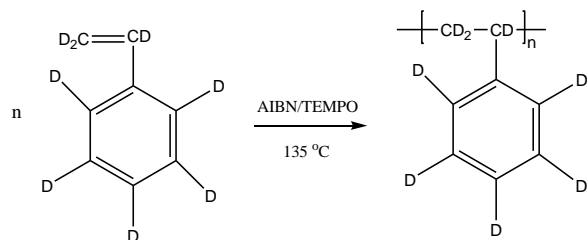


**Composition:**

Mn x 10 <sup>3</sup>	PDI
150.0	1.23

**Synthesis Procedure:**

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



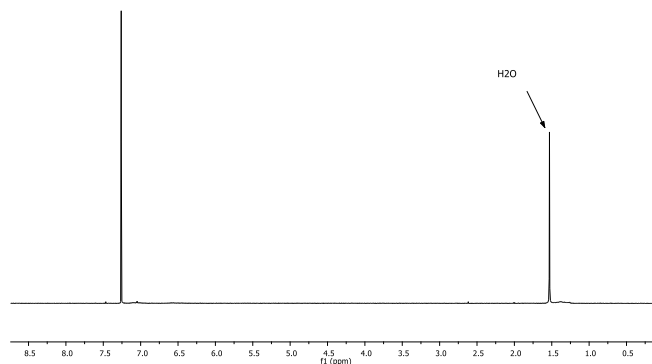
**Characterization:**

The molecular weight and polydispersity index (PDI) are obtained by size exclusion chromatography (SEC) in DMF containing 0.023 M of LiBr.

**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.

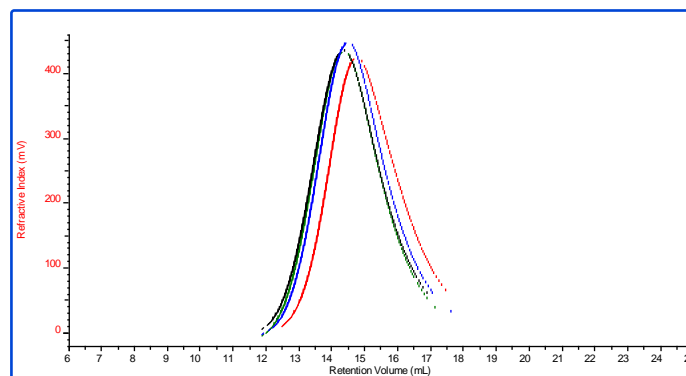
**<sup>1</sup>H NMR spectrum of the Polymer:**



**SEC elugram of the Polymer:**

**P19882-d8S**

dn/dc	0.1650
Flow Rate	0.7000
Solvent	DMF with LiBr
Method	PSS column-PMMA60K-Jan3-2019-0002.vcm



Sample	Mn	Mw	Mz	IV	Mw/Mn
P19882_1_2019	149,845	183,763	259,720	0.5105	1.226