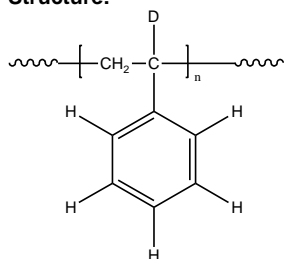


**Sample Name: Deuterated Polystyrene (d<sub>1</sub>)**

**Sample #: P18131-dPS**

**Structure:**



**Composition:**

Mn x 10 <sup>3</sup>	PDI
12.0	1.15

**Synthesis Procedure:**

Deuterated polystyrene-d<sub>1</sub> is obtained by living polymerization of styrene-d<sub>1</sub>.

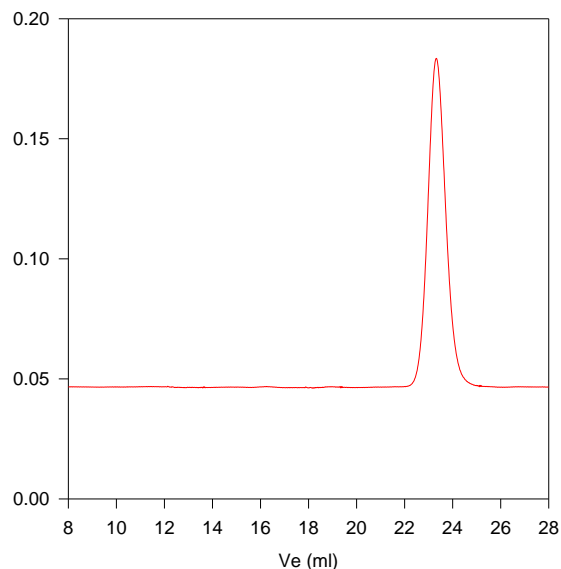
**Characterization:**

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- is soluble in DMF, THF, toluene and CHCl<sub>3</sub>. It precipitates from methanol, ethanol, water and hexanes.

**P18131-dPS**



Size exclusion chromatography of deuterated polystyrene(d<sub>1</sub>):

M<sub>n</sub>=12,000 M<sub>w</sub>=13,800, PI=1.15

**SEC of Homopolymer:**