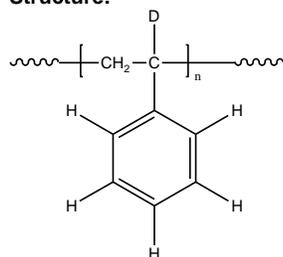


Sample Name: Deuterated Polystyrene (d₁)**Sample #: P18131-dPS****Structure:****Composition:**

Mn x 10 ³	PDI
12.0	1.15

Synthesis Procedure:

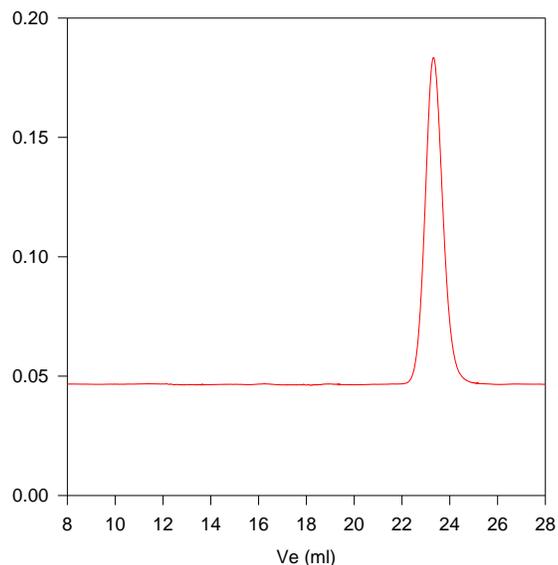
Deuterated polystyrene-d₁ is obtained by living polymerization of styrene-d₁.

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 CHCl₃. It precipitates from methanol, ethanol, water and hexanes.



Size exclusion chromatography of deuterated polystyrene(d₁):

M_n=12,000 M_w=13,800, PI=1.15

SEC of Homopolymer: