

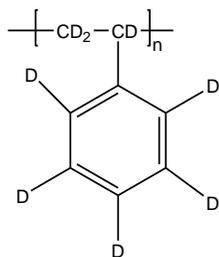
Sample Name: **Deuterated Polystyrene-d₈**

SEC elugram of Homopolymer:

Sample #: **P4415-dPS**

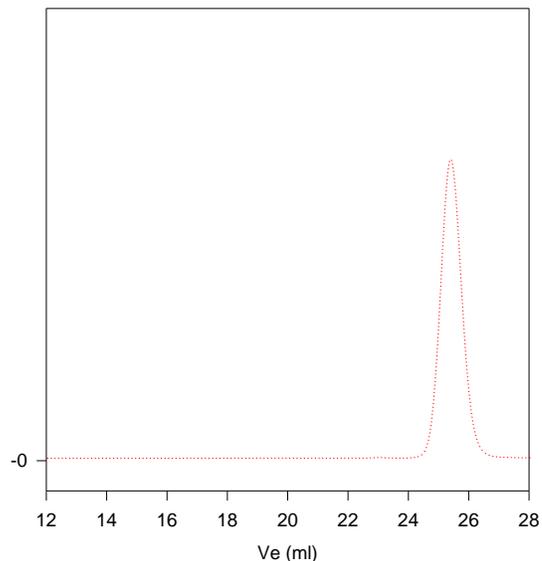
P4415-dPS

Structure:



Composition:

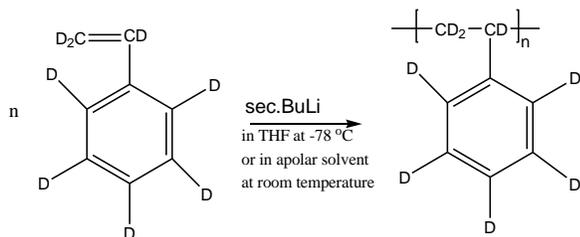
Mn x 10 ³	PDI
2.2	1.07



Size exclusion chromatograph of deuterated polystyrene(d₈):
M_n=2200, M_w=2400, PI=1.07

Synthesis Procedure:

Deuterated polystyrene-d₈ is obtained by living anionic polymerization of styrene-d₈ as illustrated below:



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-d₈ is soluble in DMF, THF, toluene and CHCl₃. It precipitates from methanol, ethanol, water, and hexanes.