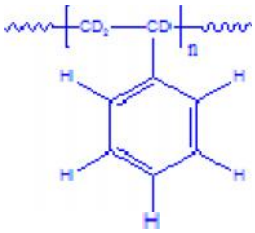
Sample Name: **Deuterated Polystyrene (d_3)**

Sample #: **P1824-d3PS**

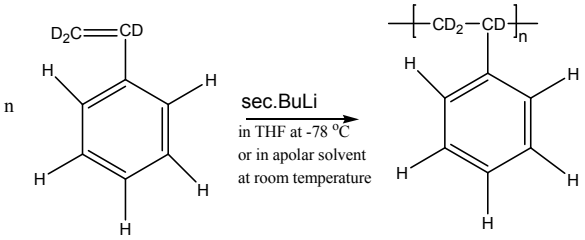
Structure:



Composition:

Mn x 10^3	PDI
15.0	1.04

Synthesis Procedure:
Deuterated polystyrene-d_3 is obtained by living anionic polymerization of styrene-d_3 as illustrated below:



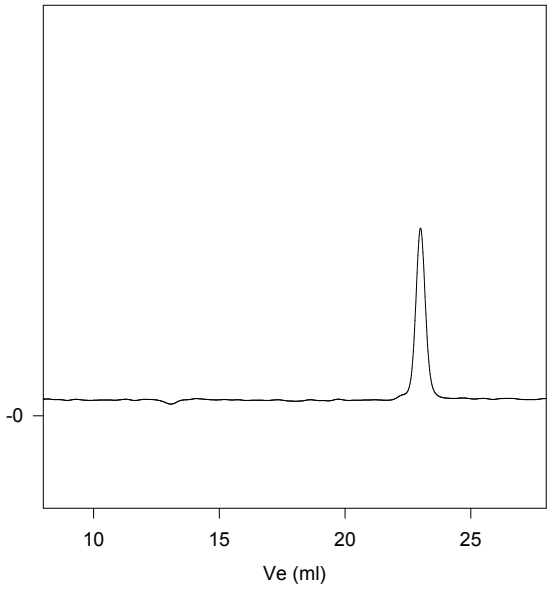
Characterization:

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-d_3 is soluble in DMF, THF, toluene and $CHCl_3$. It precipitates from methanol, ethanol, water and hexanes.

SEC profile of the product:

P1824-d3PS



Size Exclusion Chromatograph of Deuterated Polystyrene
M_n=15000, M_w=15600, M_w/M_n=1.04