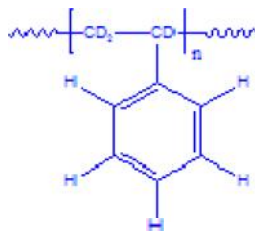


Sample Name: Deuterated Polystyrene (d_8)

Sample #: P3698-d3PS

Structure:

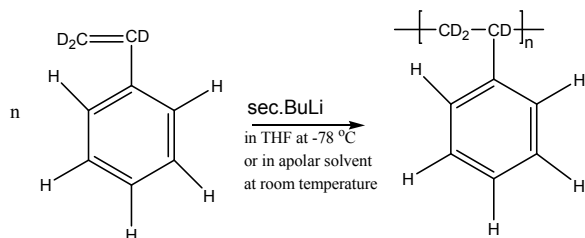


Composition:

$M_n \times 10^3$	PDI
16.0	1.15

Synthesis Procedure:

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



Characterization:

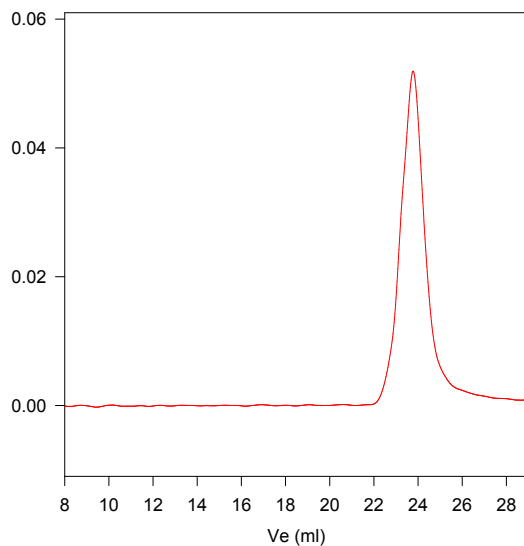
The molecular weight and polydispersity index (PDI) are obtained by size exclusion chromatography (SEC) in THF. SEC analysis was performed on a Varian liquid chromatograph equipped with refractive and UV light scattering detectors from Viscotek Co. Three SEC columns from Supelco (G6000-4000-2000 HXL) 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:

P3698-d₃PS



Size exclusion chromatograph of deuterated polystyrene(d_8):

$M_n=16000$ $M_w=18500$ $PI=1.15$