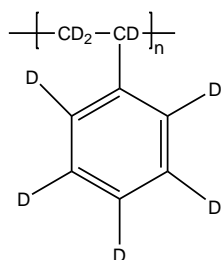


Sample Name: Deuterated Polystyrene (d₈)

Sample #: P2414-3-dPS

Structure:

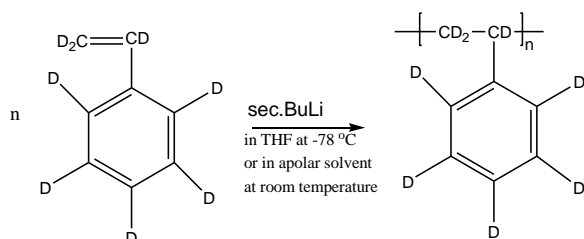


Composition:

$M_n \times 10^3$	PDI
723.7	1.5

Synthesis Procedure:

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



Characterization:

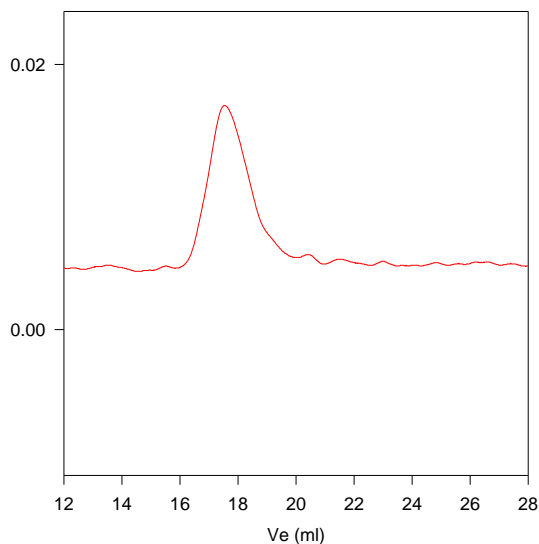
The molecular weight and polydispersity index (PDI) are obtained by size exclusion chromatography (SEC) in THF. SEC analysis was performed on a Varian liquid chromatograph equipped with refractive and UV light scattering detectors from Viscotek Co. Three SEC columns from Supelco (G6000-4000-2000 HXL)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

Solubility:

Deuterated polystyrene-d₈ is soluble in DMF, THF, toluene and $CHCl_3$. It precipitates from methanol, ethanol, water, and hexanes.

SEC profile of Homopolymer:

P2414-3-dPS



Size exclusion chromatography of deuterated polystyrene(d₈):
 $M_n=723700$ $M_w=1087000$, $PI=1.50$