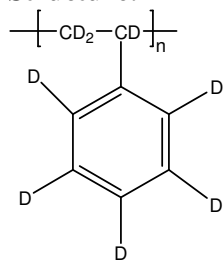


Sample Name: **Deuterated Polystyrene (d₈)**

SEC elugram of Homopolymer:

Sample #: **P2786B--dPS**

Structure:

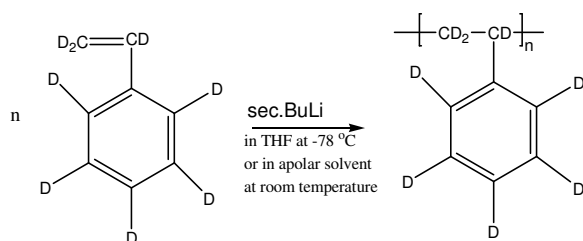


Composition:

Mn x 10 ³	PDI
21	3.7

Synthesis Procedure:

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



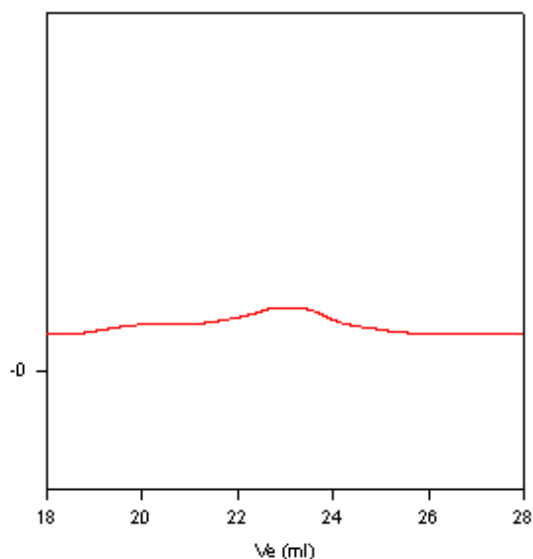
Characterization:

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.

P2786- -dPS



Size exclusion chromatograph of deuterated polystyrene(d₈):

M_n=21000 M_w=77500, P=3.3