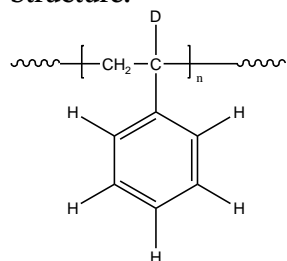


Sample Name: Deuterated Polystyrene (d₁)

Sample #: P18131A-dPS

Structure:



Composition:

Mn x 10 ³	PDI
13.0	1.15

Synthesis Procedure:

Deuterated polystyrene-d₁ is obtained by living polymerization of styrene-d₁.

Characterization:

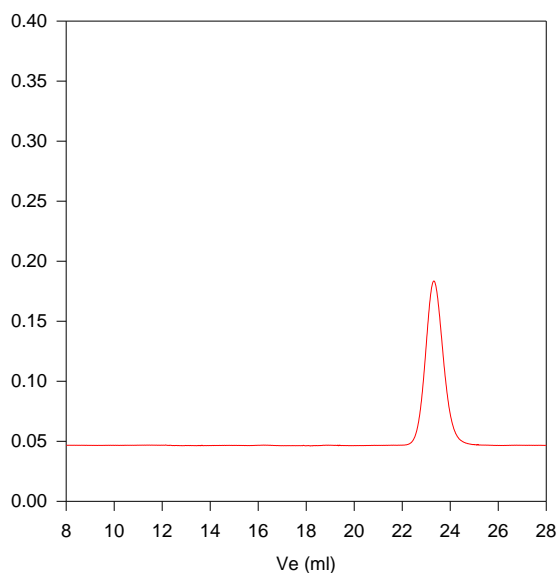
The molecular weight and polydispersity index (PDI) are obtained by size exclusion chromatography (SEC) in THF. SEC analysis was performed on a Varian liquid chromatograph equipped with refractive and UV light scattering detectors from Viscotek Co. Three SEC columns from Supelco (G6000-4000-2000 HXL)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

Solubility:

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

SEC of Homopolymer:

P18131A-dPS



Size exclusion chromatography of deuterated polystyrene(d₁):

M_n=13,000 M_w=15,000, PI=1.15