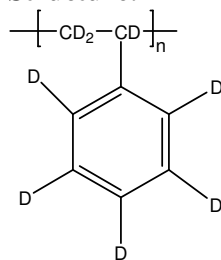


Sample Name: Deuterated Polystyrene (d₈)

Sample #: P19912D-dPS

Structure:

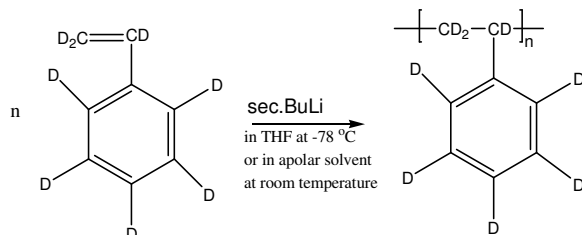


Composition:

Mn x 10 ³	PDI
645.5	1.3

Synthesis Procedure:

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



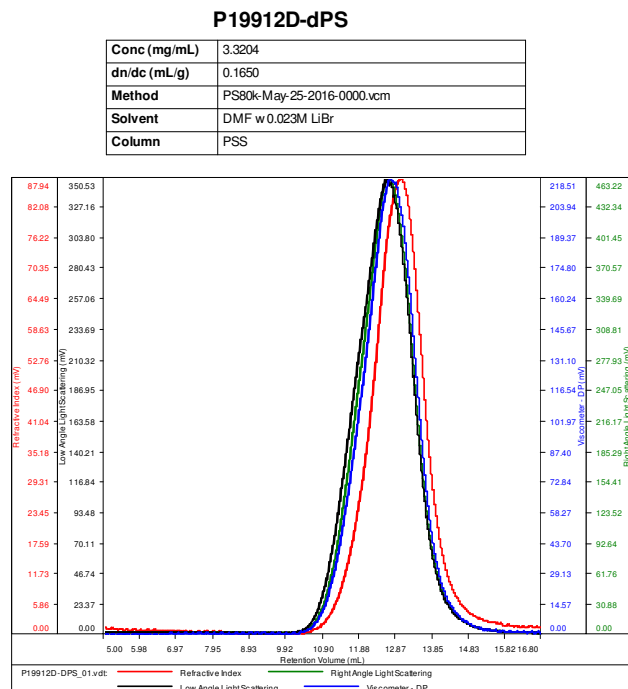
Characterization:

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.

SEC elugram of Homopolymer:



Sample	Mn	Mw	Mp	Mw/Mn	IV
P19912D-DPS_01.vdt	645,433	842,368	680,626	1.305	1.2455