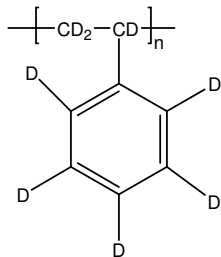


Sample Name: Deuterated Polystyrene (d₈)

Sample #: P19912A-dPS

Structure:

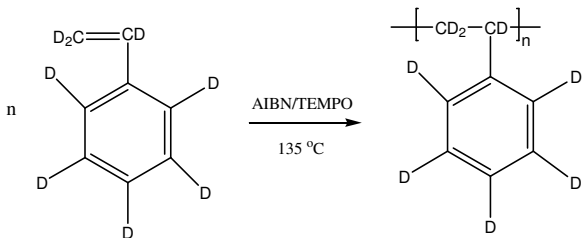


Composition:

Mn x 10 ³	PDI
693.0	1.22

Synthesis Procedure:

Deuterated polystyrene-d₈ is obtained by controlled radical 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 light scattering detectors. Three SEC columns from Supelco (G6000-4000-2000 HXL) were used with triple detectors from Viscotek Co.

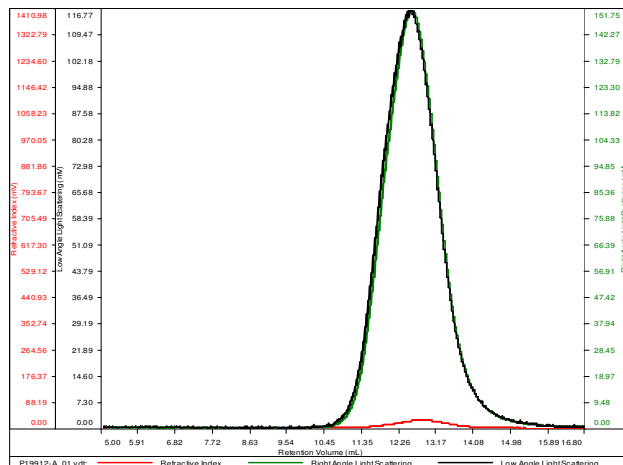
Solubility:

Deuterated polystyrene-d₈ is soluble in DMF, THF, toluene and CHCl₃. It precipitates from methanol, ethanol, water and hexanes.

SEC elugram of Homopolymer:

P19912A-dPS

Conc (mg/mL)	0.9672
dn/dc (mL/g)	0.1650
Method	ps80k-May2016-0002.vcm
Solvent	DMF w 0.023M LiBr
Column	PSS



Sample	Mn	Mw	Mp	Mw/Mn	IV
P19912-A_01.vcl	693,313	847,378	780,478	1.222	1.0659