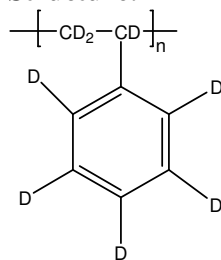


Sample Name: Deuterated Polystyrene (d₈)

Sample #: P19892-dPS

Structure:

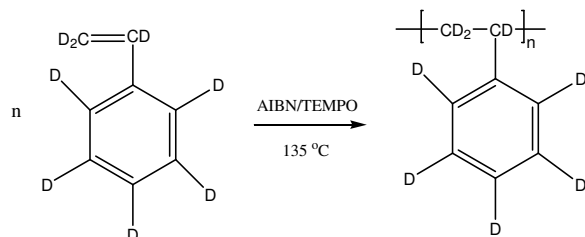


Composition:

Mn x 10 ³	PDI
458.0	1.45

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.

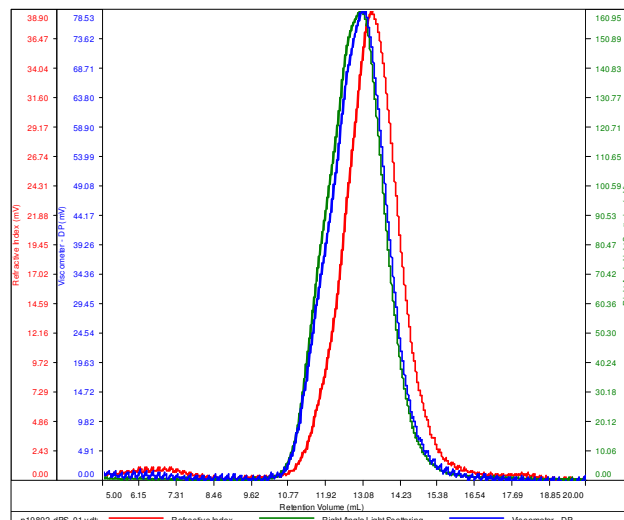
Solubility:

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

SEC elugram of Homopolymer:

P19892-dPS

Conc (mg/mL)	1.7775
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
p19892-dPS_01.vdt	458,179	672,328	517,926	1.467	1.0463