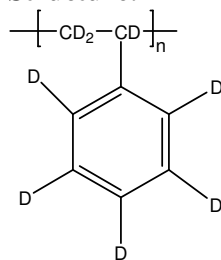


Sample Name: Deuterated Polystyrene (d₈)

Sample #: P14073-dPS

Structure:

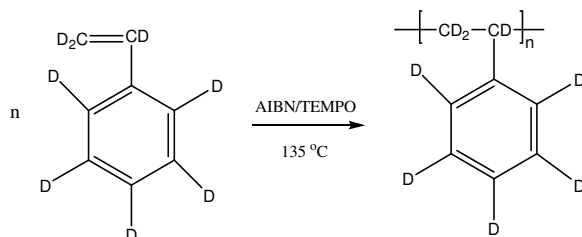


Composition:

Mn x 10 ³	PDI
39.0	1.15

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.

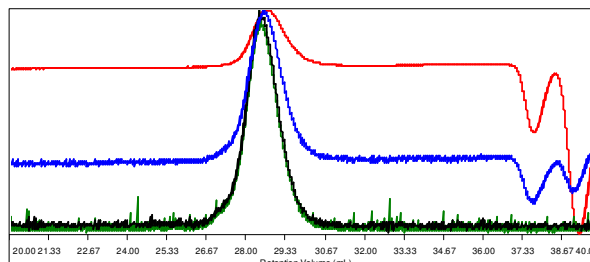
Solubility:

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

SEC elugram of Homopolymer:

Sample ID: P14073-dPS

Concentration	1.2413
Sample dn/dc	0.1700
Method File	PS99K-Oct13-0000.v cm
Column Set	3x PL 1113-6300
System	System 1



Sample	Mn	Mw	Mz	Mw/Mn	IV	Rh
2010-10-20_14;33;03_P14073_01.vd	38,898	44,618	51,929	1.147	0.2334	7.08

