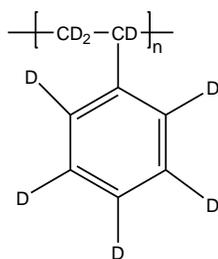


Sample Name: **Deuterated Polystyrene (d₈)**

Sample #: **P3586F1A-dPS**

Structure:

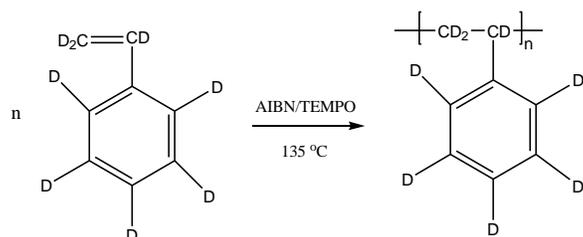


Composition:

Mn x 10 ³	PDI
1,452.0	1.19

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:

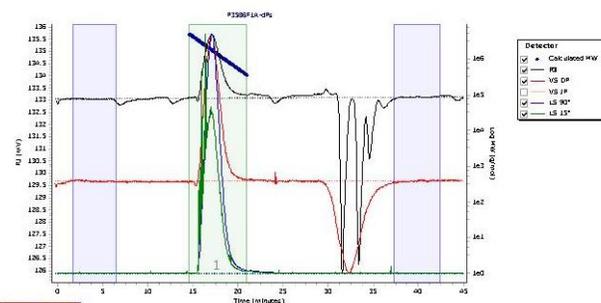
Deuterated polystyrene-d₈ is soluble in DMF, THF, toluene and CHCl₃. It precipitates from methanol, ethanol, water and hexanes.

SEC elugram of Homopolymer:

Agilent GPC/SEC Software

P3586F1A-dPs

Chromatogram Plot



Molecular Weight Averages

Peak	Mp (g/mol)	Mn (g/mol)	Mw (g/mol)	Mz (g/mol)	Mz+1 (g/mol)	Mv (g/mol)	PDI
Peak 1	1754635	1425164	1702216	1937079	2153042	1677793	1.194