

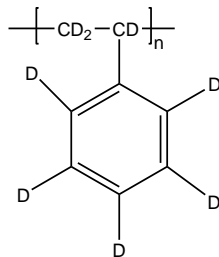
Sample Name: Deuterated Polystyrene (d₈)

SEC elugram of Homopolymer:

Agilent GPC/SEC Software

Sample #: P3686AF-dPS

Structure:

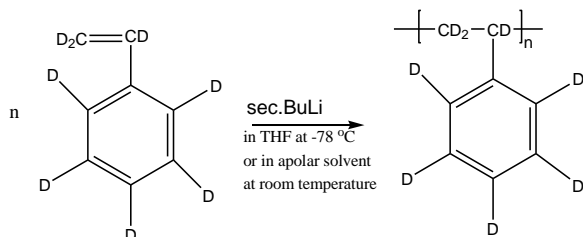


Composition:

Mn x 10 ³	PDI
1,755.0	1.14

Synthesis Procedure:

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

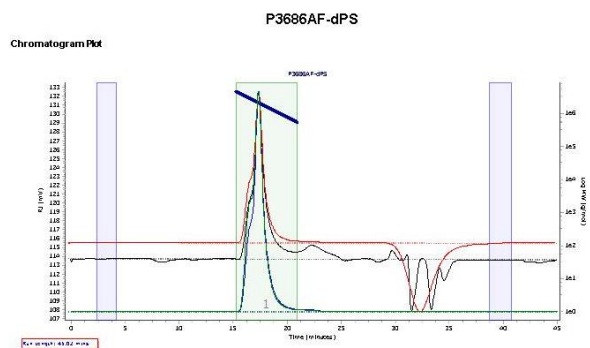


Characterization:

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.



Molecular Weight Averages							PDI
Peak	Mp (g/mol)	Mn (g/mol)	Mw (g/mol)	Mz (g/mol)	Mz+1 (g/mol)	Mv (g/mol)	

Peak 1	2033961	1755995	1994280	2178759	2332807	2150882	1.136
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