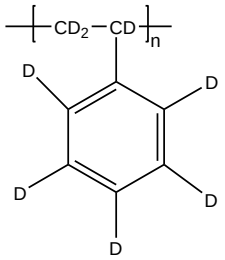
Sample Name: **Deuterated Polystyrene (d_8)**

Sample #: **P44212B-dPS**

Structure:



Composition:

Mn x 10^3	PDI
622.0	1.31

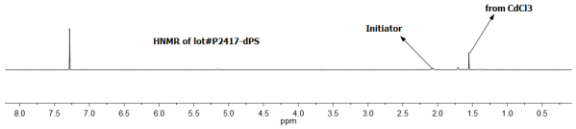
D atom: +98

Synthesis Procedure:
Deuterated polystyrene-d_8 is obtained by living anionic polymerization of styrene-d_8. **D8Styrene bears D atom % over 98.**

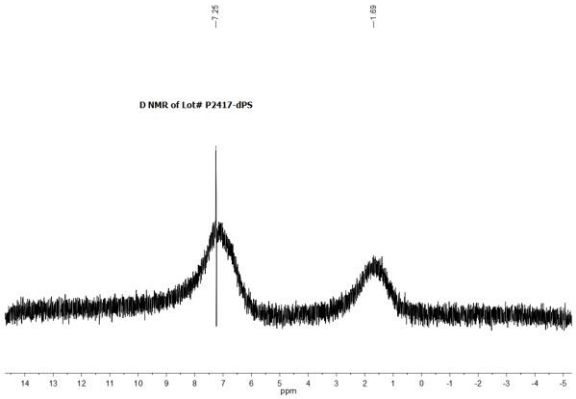
Characterization:
The molecular weight and polydispersity index (PDI) are obtained by size exclusion chromatography (SEC) in THF. SEC analysis was performed on a Varian liquid chromatograph equipped with refractive and UV light scattering detectors from Viscotek Co. Three SEC columns from Supelco (G6000-4000-2000 HXL) were used.

Solubility:
Deuterated polystyrene-d_8 is soluble in DMF, THF, toluene and $CHCl_3$. It precipitates from methanol, ethanol, water, and hexanes.

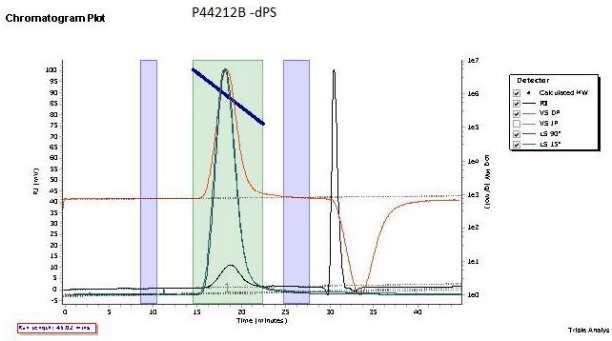
HNMR spectrum of the Polymer:



D NMR spectrum of the Polymer:



SEC elugram of Homopolymer:



Molecular Weight Averages

Peak	Mp (g/mol)	Mn (g/mol)	Mw (g/mol)	Mz (g/mol)	Mz+1 (g/mol)	Mv (g/mol)	PD
Peak 1	733876	622630	819323	1036485	1262407	1003187	1.316