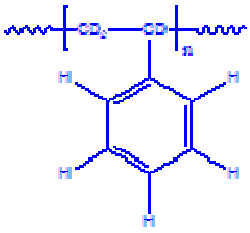
Sample Name: **Deuterated Polystyrene (d_3)**

Sample #: **P18722-d3PS**

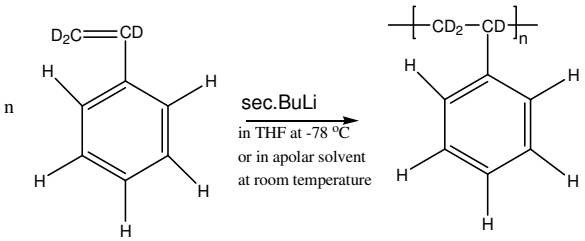
Structure:



Composition:

Mn x 10^3	PDI
454.0	1.4

Synthesis Procedure:
Deuterated polystyrene-d_3 is obtained by living anionic polymerization of styrene-d_3 as illustrated below:



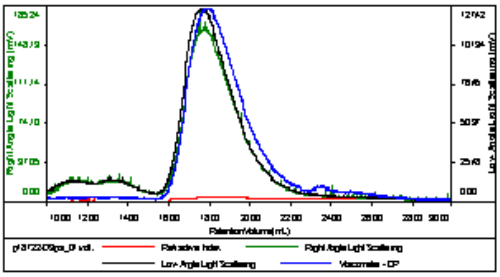
Characterization:

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-d_3 is soluble in DMF, THF, toluene and $CHCl_3$. It precipitates from methanol, ethanol, water and hexanes.

SEC profile of the product:
Sample ID: P18722-d3dPS

Concentration (mg/mL)	35245
Sample dn/dc (mL/g)	0.1850
Method File	PS80K-Apr15-2014-0000.ucm
Column Set	3x PL 1113-6300
Solvent	THF



Sample	Mn	Mw	Mp	Mw/Mn	IV
p18722-03pc_01.ucd	454,010	619,602	659,241	1.365	0.8035