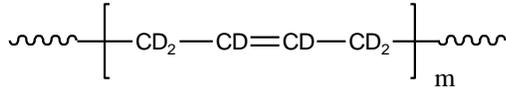


Sample Name: Deuterated Poly(1,4-butadiene-d6), end-groups are hydrogen-containing

Sample #: P42237A-dBd

Structure:

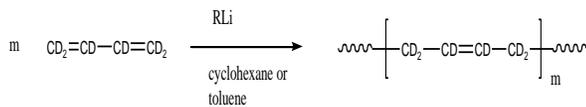


Composition:

$M_n \times 10^3$	M_w/M_n
1.0	1.10

Synthesis Procedure:

Deuterated polybutadiene-d₆ was obtained by living anionic polymerization of butadiene-d₆ monomer:



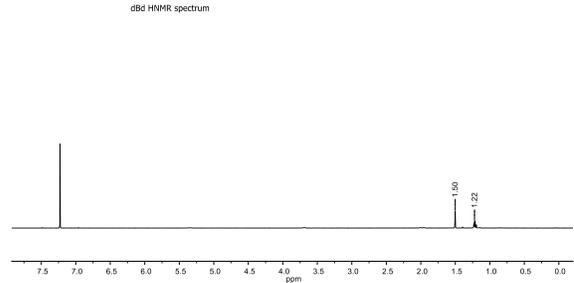
Characterization:

The molecular weight and polydispersity index (M_w/M_n) of the deuterated poly butadiene 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.

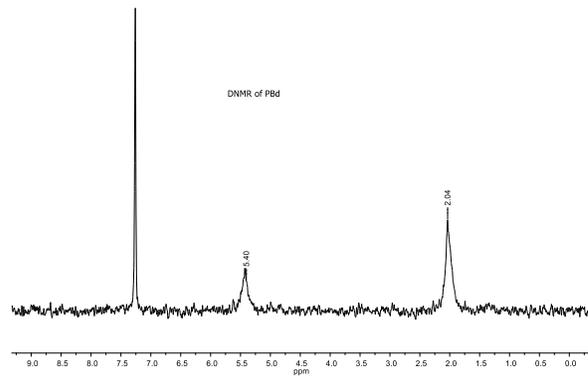
Solubility:

Polymer is soluble in toluene, THF and CHCl_3 .

H NMR spectrum of the Sample:



D NMR spectrum of the Sample:

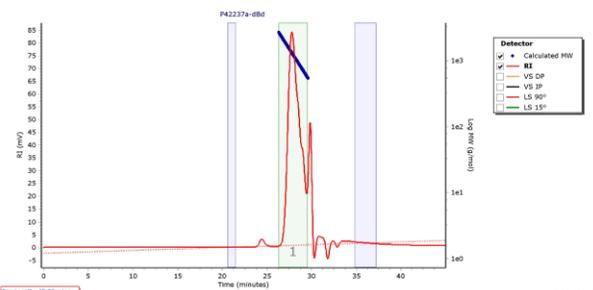


SEC elugram of the polymer:

Agilent GPC/SEC Software

P42237a-dBd

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)	PD
Peak 1	1316	1052	1169	1273	1368	1246	1.101