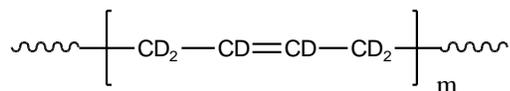


Sample Name: Deuterated Polybutadiene-*d*₆ (predominantly 1,4-addition), protonated end-groups.

Sample #: P42213A-dBd

Structure:

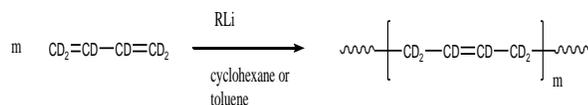


Composition:

$M_n \times 10^3$	M_w/M_n
540.0	1.36

Synthesis Procedure:

Deuterated polybutadiene-*d*₆ was obtained by living anionic polymerization of butadiene-*d*₆ monomer:



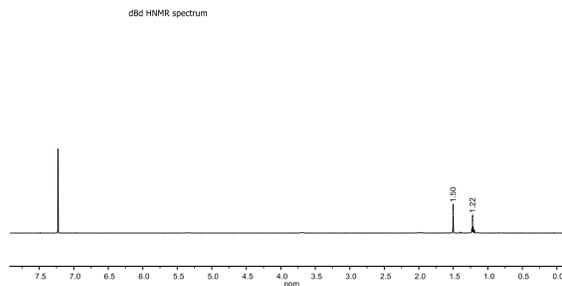
Characterization:

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.

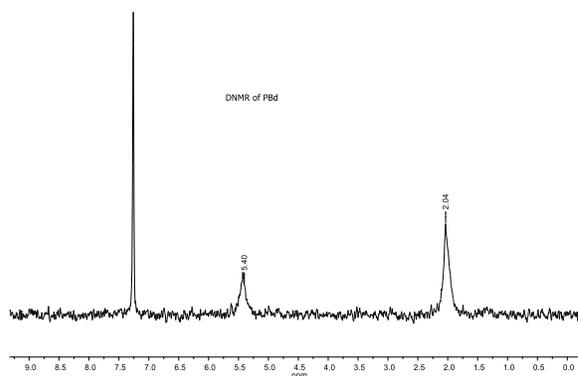
Solubility:

Polymer is soluble in toluene, THF and CHCl_3 .

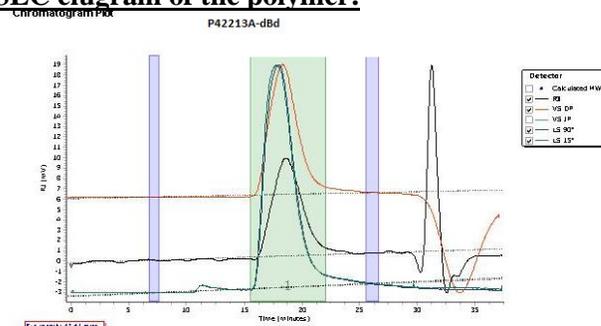
H NMR spectrum of the Sample:



D NMR spectrum of the Sample:



SEC elugram of the polymer:



Peak	Mp (g/mol)	Mn (g/mol)	Mw (g/mol)	Mz (g/mol)	Mz+1 (g/mol)	Mu (g/mol)	PDI
Peak 1	712275	540887	735798	939848	1128642	895532	1.36