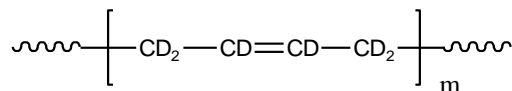


**Sample Name:** Deuterated Poly(1,4-butadiene-d6), end-groups are hydrogen-containing

**Sample #:** P42237B-dBd

**Structure:**

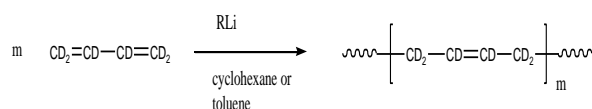


**Composition:**

$M_n \times 10^3$	$M_w/M_n$
202.5	1.05

**Synthesis Procedure:**

Deuterated polybutadiene-d<sub>6</sub> was obtained by living anionic polymerization of butadiene-d<sub>6</sub> monomer:



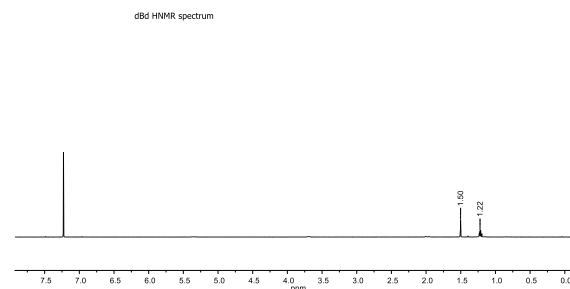
**Characterization:**

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.

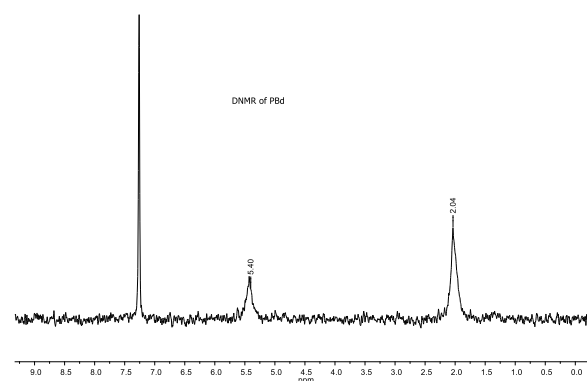
**Solubility:**

Polymer is soluble in toluene, THF and  $\text{CHCl}_3$ .

**H NMR spectrum of the Sample:**



**D NMR spectrum of the Sample:**



**SEC elugram of the polymer:**

Agilent GPC/SEC Software

