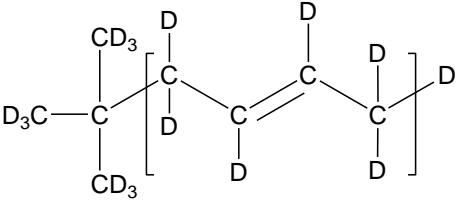


Sample Name: Completely Deuterated poly butadiene  
–deuterated rich in 1,4 addition

Sample #: P41077-dPBd

Structure:



Composition:

Mn x 10 <sup>3</sup>	PDI
46.5	1.08

Synthesis Procedure:

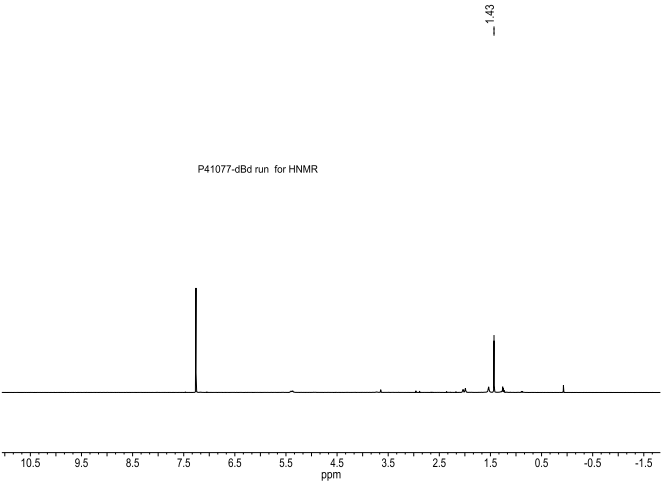
Polymer was synthesized by living anionic polymerization of d6 butadiene monomer using d9 tert.butyl- lithium initiator.

Characterization:

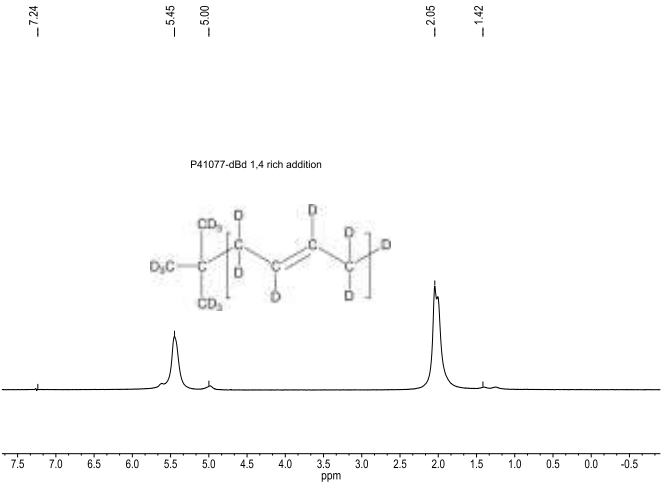
The product was characterized by size exclusion chromatography (SEC), <sup>1</sup>HNMR and DNMR.

HNMR spectrum of the polymer:

Protonic analog impurity < 1%



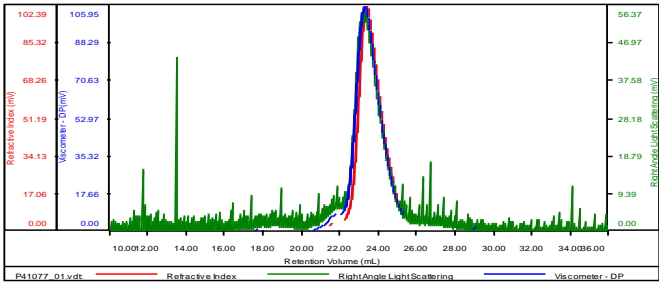
D NMR spectrum of the polymer:



SEC elugram of the polymer:

P41077-dBd

Concentration (mg/mL)	4.4589
Sample dn/dc (mL/g)	0.1650
Method File	PS105K-April10-0002.vcm
Column Set	3x PL 1113-6300
Solvent	THF



Sample	Mn (Da)	Mw (Da)	Mw/Mn	IV (dL/g)	Mp (Da)
P41077_01.vct	46,454	50,529	1.088	0.8592	44,551