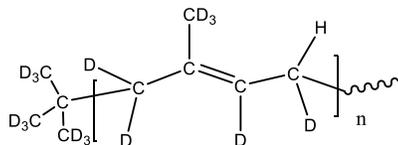


**Sample Name: Deuterated Poly(1,4-isoprene-d7)**

**Sample #: P42253-d7Ip**

**Structure:**



**Composition:**

Mn x 10 <sup>3</sup>	PDI
1.1	1.16

**Synthesis Procedure:**

Polyisoprene is obtained by anionic polymerization of deuterated (d7) isoprene initiated by d9 tBuLi initiator.

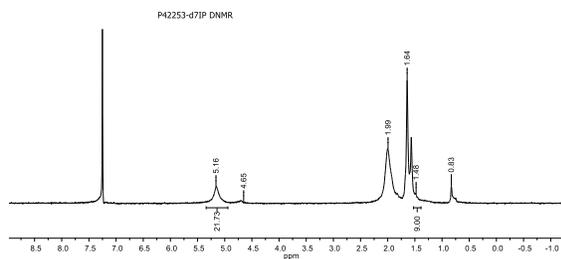
**Characterization:**

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. Three SEC columns from Supelco (G6000-4000-2000 HXL) were used with triple detectors from Viscotek Co.

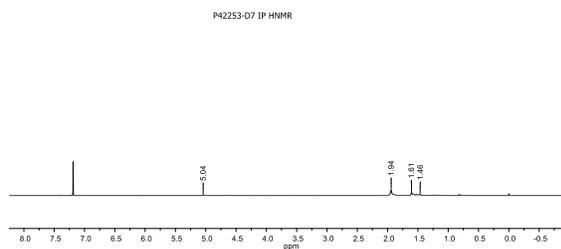
**Solubility:**

Polymer is soluble in THF, toluene, hexane and chloroform. This polymer precipitates from methanol.

**<sup>2</sup>H NMR spectrum of the Sample:**



**<sup>1</sup>H NMR spectrum of the Sample:**

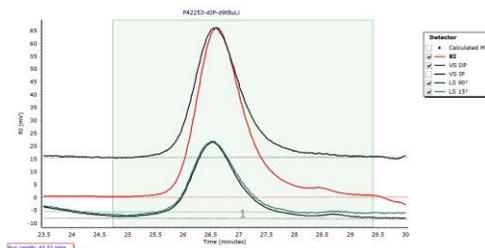


**SEC elugram of the Sample:**

Agilent GPC/SEC Software

P42253-dIP-d9tBuLi

Chromatogram Plot



Molecular Weight Averages							
Peak	Mp (g/mol)	Mn (g/mol)	Mw (g/mol)	Mz (g/mol)	Mz+1 (g/mol)	Mz (g/mol)	PD
Peak 1	1350	1103	1261	1424	1568	1362	1.181