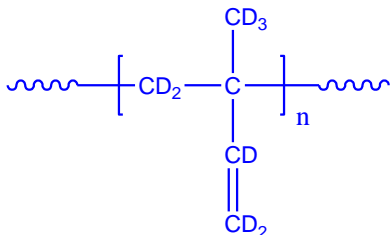


**Sample Name:**  
**Deuterated Polyisoprene-d8 (1,2-addition)**

**Sample #:** P9922A-dPIp

**Structure:**

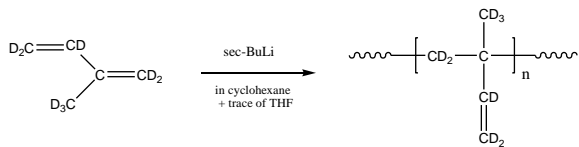


**Composition:**

$M_n \times 10^3$	PDI
4.5	1.18

**Synthesis Procedure:**

Polyisoprene is obtained by anionic polymerization of deuterated (d8) isoprene, which contains 1% of THF.



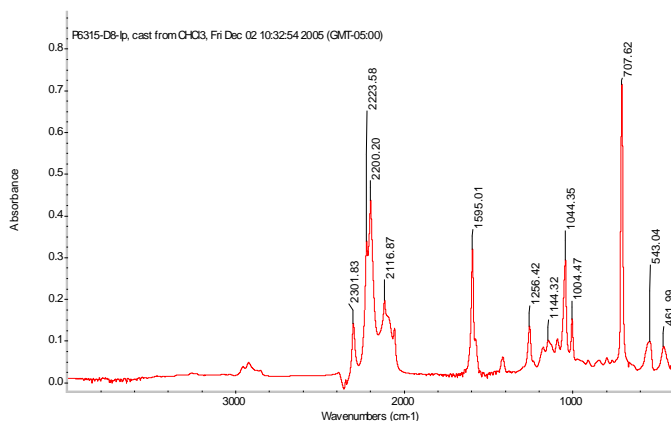
**Characterization:**

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:**

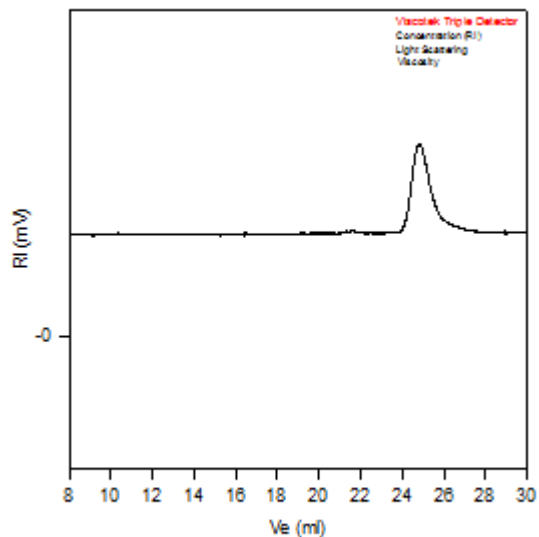
Polymer is soluble in THF, toluene, hexane and chloroform. This polymer precipitates from methanol.

**FTIR of Sample:**



**SEC of Sample:**

**P9922A-dPIp (1,2 addition)**



Size Exclusion Chromatography of  
 $M_n = 4,500$ ,  $M_w = 5,200$ ,  $M_w/M_n = 1.18$

**Deuterium NMR of Monomer:**

