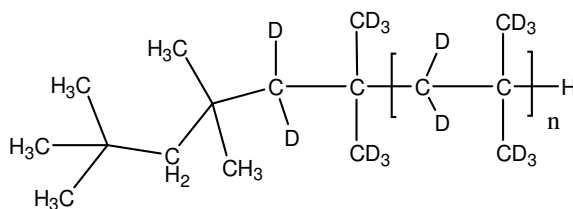


**Sample Name: Deuterated d8 Polyisobutylene**

**Sample #:**

**P18651- Pd8 IB**



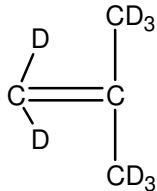
**Composition:**

Mn x 10 <sup>3</sup>	PDI
2.2	1.35

**Synthesis Procedure:**

deuterated d8 Polyisobutylene is synthesized by living cationic polymerization of d4 isobutylene in hexane at -78 °C using a tin based catalyst and a 2,4,4-dimethyl pentene / HCl initiator.

Monomer used was d8 isobutylene



**Purification:**

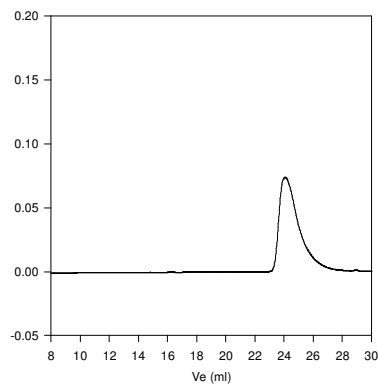
After polymerization the catalyst residues are removed by filtration and washing with acidic water after which the pH is returned to nominal values and finally the polymer is freeze dried.

**Characterization:**

The molecular weight and polydispersity index (PDI) of polyisobutylene are obtained by size exclusion chromatography.

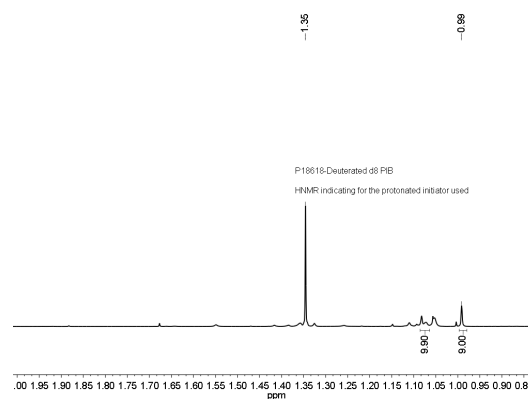
**SEC of Homopolymer:**

**P18651-d8IB**



Size exclusion chromatograph of polymer  
M<sub>n</sub>=2200, M<sub>w</sub>=3,000, PI=1.35

**HNMR of the Polymer:**



**D NMR**

