

**Sample Name: Deuterated poly butadiene**  
1,4 addition is 20.5% by FTIR and 25% by  
1H NMR

**Sample #: P1797-dBd**

**Composition:**

Mn x 10 <sup>3</sup>	PDI
325.0	1.12

**Synthesis Procedure:**

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

**Characterization:**

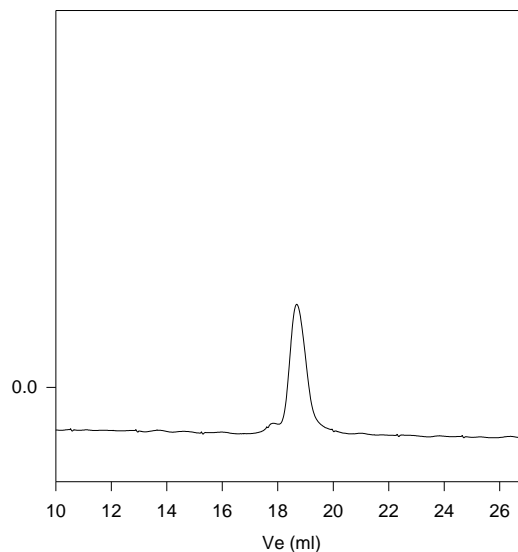
The molecular weight and polydispersity index (PDI) of the deuterated poly butadiene are obtained by size exclusion chromatography (SEC) in THF. SEC analysis was performed on a Varian liquid chromatograph equipped with refractive and UV light scattering detectors from Viscotek Co. Three SEC columns from Supelco (G6000-4000-2000 HXL) were used.

**Deuteration:**

**Solubility:** Polymer is soluble in toluene THF . CHCl<sub>3</sub>

**SEC profile of the product:**

**P1797-dBd**



Size exclusion chromatography of deuterated polybutadiene(d<sub>6</sub>):

M<sub>n</sub>=325000, M<sub>w</sub>=364000, M<sub>w</sub>/M<sub>n</sub>=1.12