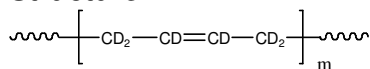


Sample Name: **Deuterated 1,4-Polybutadiene**

Sample #: **P18308A-dPBd**

**Structure:**

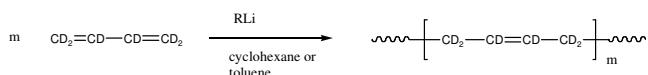


**Composition:**

Mn x 10 <sup>3</sup>	PDI
31.0	1.06

**Synthesis:**

Deuterated 1,4-polybutadiene -d<sub>6</sub> was synthesized by living anionic polymerization of d<sub>6</sub> butadiene monomer:

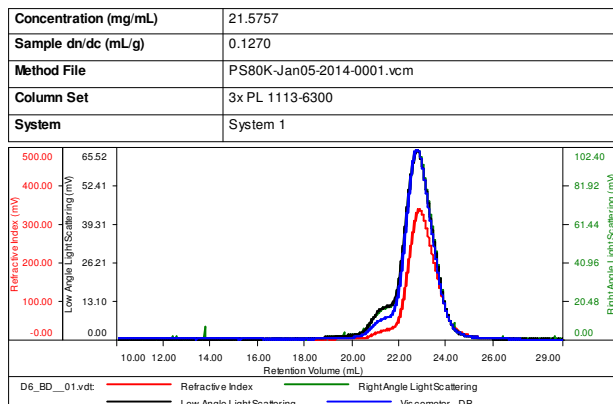


**Solubility:** The product is soluble in toluene, THF and CHCl<sub>3</sub>.

**Characterization:**

The molecular weight and polydispersity index (PDI) of the deuterated poly(1,4-butadiene) were 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 and Supelco (G6000-4000-2000 HXL) columns.

**SEC profile of the product:**



Sample	Mn	Mw	Mp	Mw/Mn	IV
D6_BD__01.vdt	31,052	32,946	30,429	1.061	0.5860