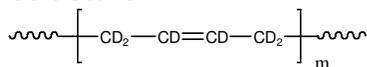


Sample Name: Deuterated 1,4-Polybutadiene

Sample #: P18308A-dPBd

Structure:

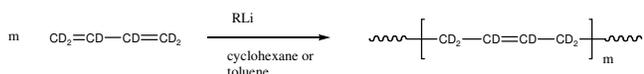


Composition:

Mn x 10 ³	PDI
31.0	1.06

Synthesis:

Deuterated 1,4-polybutadiene -d₆ was synthesized by living anionic polymerization of d₆ butadiene monomer:

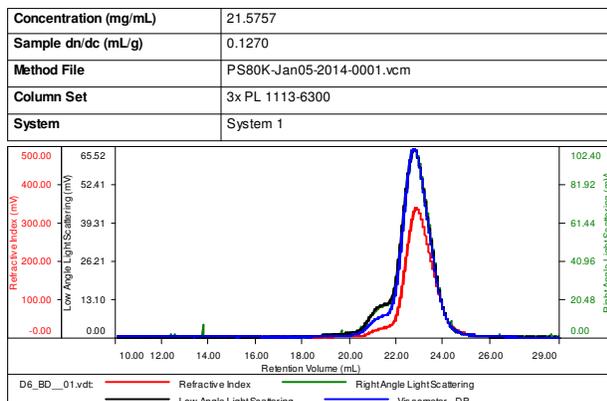


Solubility: The product is soluble in toluene, THF and CHCl₃.

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