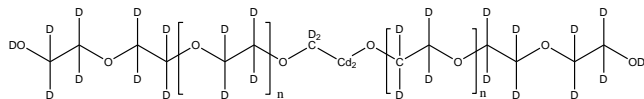


**Sample Name: Deuterated Poly (ethylene glycol) Dihydroxy Terminated**

**Sample #: P43216B-dPEO2OD**

**Structure:**



**Composition:**

Mn x 10 <sup>3</sup>	PDI
6.0	1.5

**Synthesis Procedure:**

Deuterated Poly (ethylene glycol) dihydroxy terminated is obtained by living anionic polymerization using  $\alpha$ - $\omega$ -dipotassium alkoxide of ethylene glycol. Polymerization of freshly distilled deuterated ethylene oxide was carried out at room temperature for 24h followed by termination with acidic methanol. The obtained polymer was passed through neutral Al<sub>2</sub>O<sub>3</sub> packed column and precipitated in ethyl ether at low temperature. Polymer was dried at room temperature for 24h.

**Characterization:**

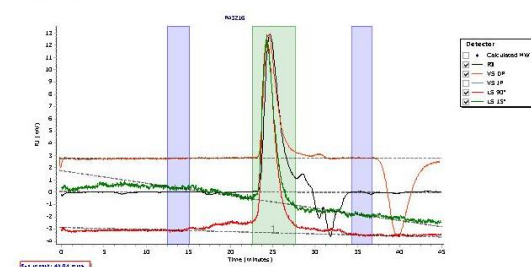
The product was characterized by size exclusion chromatography (SEC), elemental analysis and <sup>1</sup>H- DNMR.

Potassium analysis was done by GLI Procedure ME-70 Galbraith K<24 ppm

**SEC elugram of Sample:**

P43216

Chromatogram Plot



Peak	Mp (g/mol)	Mn (g/mol)	Mw (g/mol)	Mz (g/mol)	Mz+1 (g/mol)	Mw (g/mol)	PDI
Peak 1	10212	5699	8805	11888	14366	10967	1.545

**D NMR spectrum of the polymer:**

