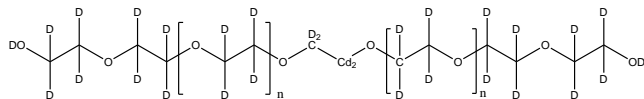


**Sample Name: Deuterated Poly (ethylene glycol)  
Dihydroxy Terminated**

**Sample #: P44396-dPEO2OD**

**Structure:**



**Composition:**

Mn x 10 <sup>3</sup>	PDI
2.0	1.13

**Synthesis Procedure:**

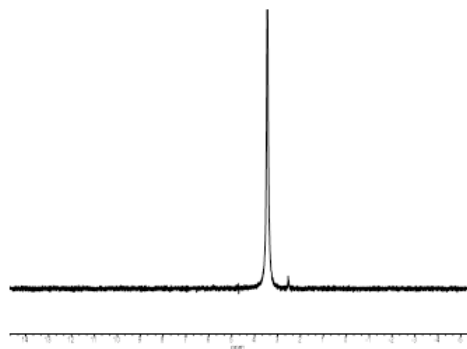
Deuterated Poly (ethylene glycol) dihydroxy terminated is obtained by living anionic polymerization using  $\alpha$ - $\omega$ -dipotassium alkoxide of ethylene glycol. Polymerization of freshly distilled deuterated ethylene oxide was carried out at room temperature for 24h followed by termination with acidic methanol. The obtained polymer was passed through neutral  $\text{Al}_2\text{O}_3$  packed column and precipitated in ethyl ether at low temperature. Polymer was dried at room temperature for 24h.

**Characterization:**

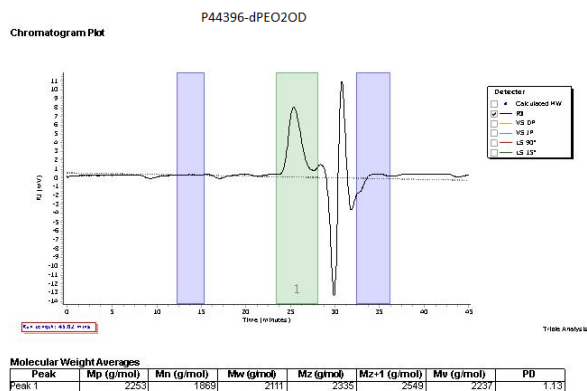
The product was characterized by size exclusion chromatography (SEC), elemental analysis and  $^1\text{H}$ -DNMR.

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

**D NMR spectrum of the polymer:**



**SEC elugram of Sample:**



Molecular Weight Averages							PDI
Peak	Mp (g/mol)	Mn (g/mol)	Mw (g/mol)	Mz (g/mol)	Mz+1 (g/mol)	Mw (g/mol)	
Peak 1	2253	1889	2111	2335	2549	2237	1.13