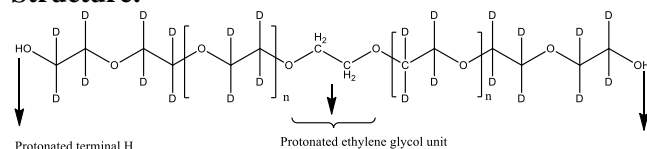


Sample Name: Deuterated Poly (ethylene glycol) Dihydroxy Terminated

Sample #: dPEO2OH-5K

Structure:



Composition:

Mn x 10 ³	PDI
4.9	1.09

Synthesis Procedure:

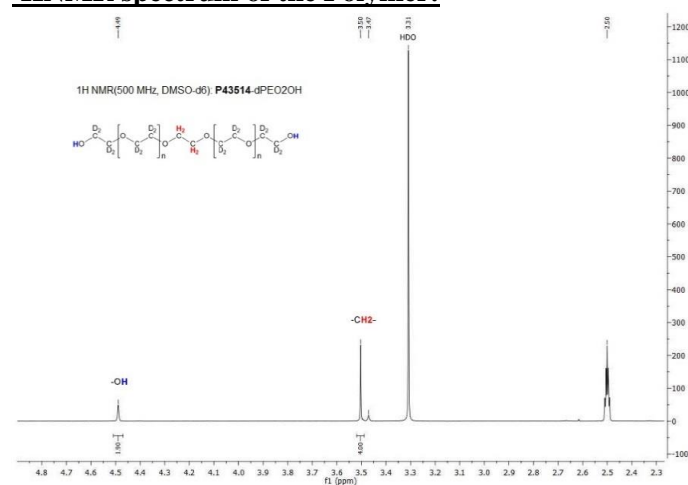
Deuterated Poly (ethylene glycol) dihydroxy terminated is obtained by living anionic polymerization using α - ω -dipotassium alkoxide of ethylene glycol. Polymerization of freshly distilled deuterated ethylene oxide was carried out at room temperature for 24h followed by termination with acidic methanol. The obtained polymer was passed through neutral Al₂O₃ packed column and precipitated in ethyl ether at low temperature. Polymer was dried at room temperature for 24h.

Characterization:

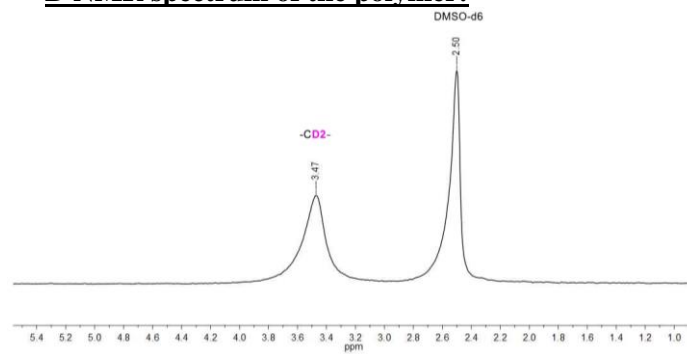
The product was characterized by size exclusion chromatography (SEC), elemental analysis and ¹H- DNMR.

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

¹HNMR spectrum of the Polymer:

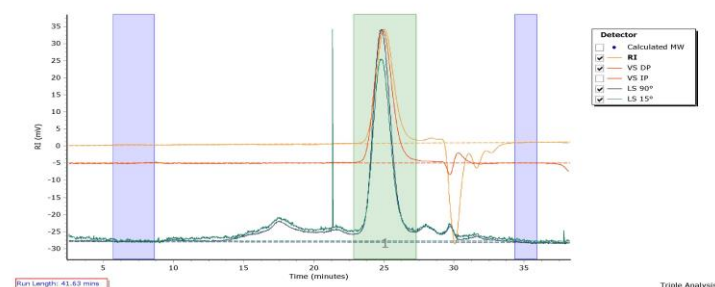


D NMR spectrum of the polymer:



SEC elugram of Sample:

Chromatogram Plot



Molecular Weight Averages						
Peak	Mp (g/mol)	Mn (g/mol)	Mw (g/mol)	Mz (g/mol)	Mz+1 (g/mol)	Mv (g/mol)
Peak 1	5344	4878	5339	5789	6238	5696
Injection volume (μL)		100.00				
Flow rate (mL/min)		1.00				
Entered dn/dc (mL/g)		0.066				
		PD				
		1.094				