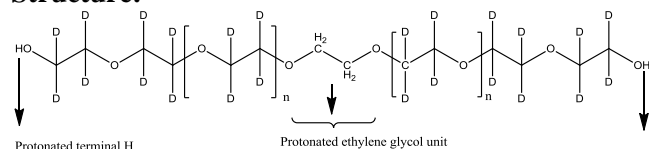


**Sample Name: Deuterated Poly (ethylene glycol)
Dihydroxy Terminated**

Sample #: P40735A-dPEO2OH

Structure:



Composition:

Mn x 10 ³	PDI
4.2	1.16

Synthesis Procedure:

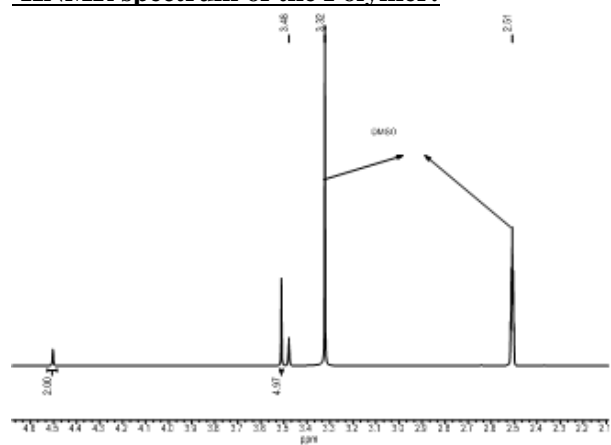
Deuterated Poly (ethylene glycol) is obtained by living anionic polymerization using α - ω , dipotassium alkoxide of ethylene glycol. Polymerization of freshly distilled deuterated ethylene oxide was carried out at room temperature for 24h followed by termination with acidic methanol. The obtained polymer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

Characterization:

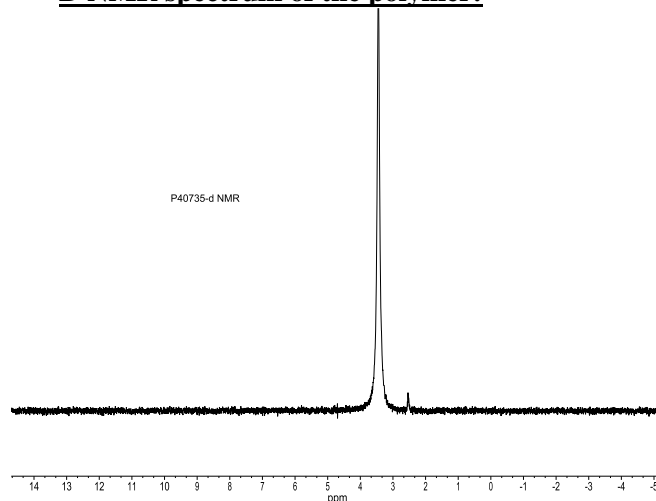
The product was characterized by size exclusion chromatography (SEC) and, elemental analysis and ¹H- DNMR.

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

¹HNMR spectrum of the Polymer:

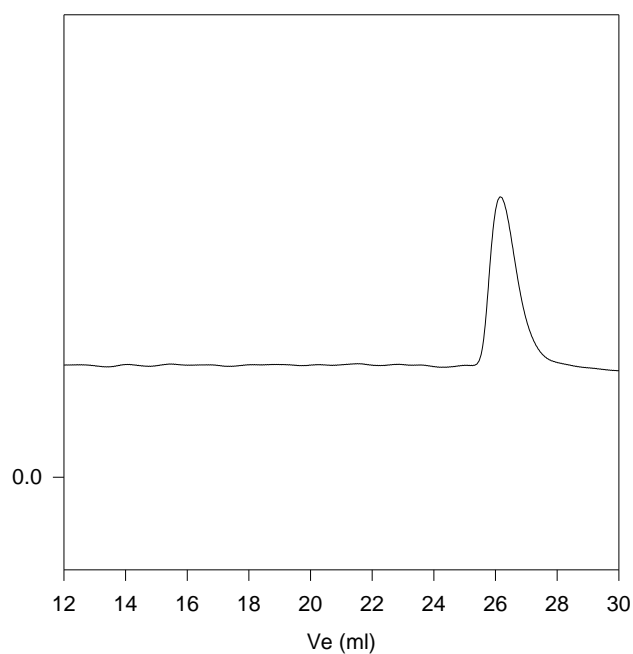


D NMR spectrum of the polymer:



SEC elugram of Sample:

P40735A-dPEO 2OH



Size Exclusion Chromatography of
Deuterated Poly(ethylene glycol-d₄)

M_n = 4,200, M_w = 4900, PI = 1.16