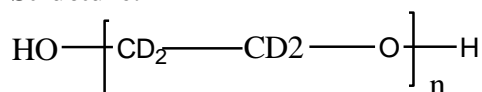


Sample Name: Deuterated Poly(ethylene glycol) Dihydroxy Terminated

Sample #: P40477-dPEO

Structure:



Composition:

Mn x 10 ³	PDI
93.0	1.07

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 molecular weight and polydispersity index (PDI) are obtained by size exclusion chromatography.

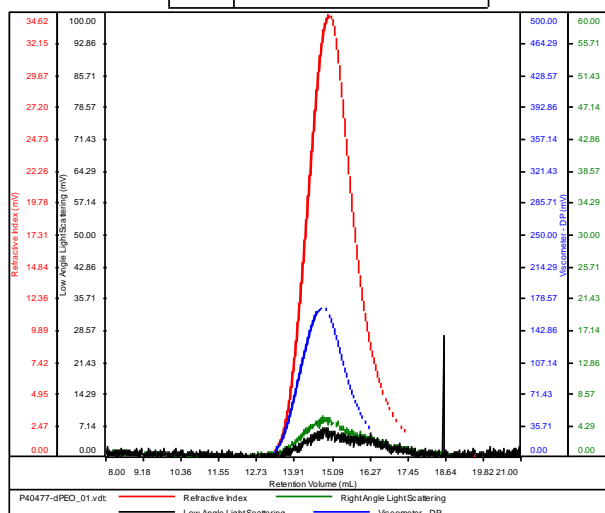
Solubility:

Poly(ethyl glycol) is soluble in toluene, THF, water and CHCl₃. The polymer is insoluble in hexane, ether, isopropanol and cold ethanol.

SEC elugram of Sample:

P40477-dPEO

ID	P40477-dPEO
Conc	8.3603
Recovery	836.0257
dn/dc	0.0440
Method	PS80K-March2017-0002.vcm



Sample	Mn	Mw	Mp	Mw/Mn	IV
P40477-dPEO_01.vdt	93,301	100,285	92,245	1.075	0.3773