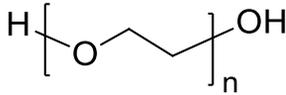


Sample name: Poly(ethylene glycol)

Other names: Poly(ethylene oxide), PEG, PEO

Sample # P40292-EG2OH

Structure:



Composition:

$M_n \times 10^3$ (g/mol)	PDI
10	1.05

Synthesis Procedure:

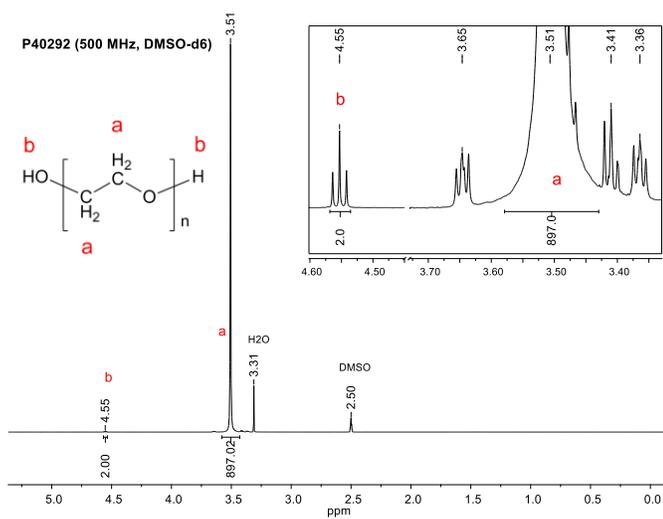
Poly(ethylene glycol) was obtained by living anionic polymerization.

Characterization:

The purity and polymer structure were confirmed by ¹H NMR analysis done on 500 MHz Bruker spectrometer using CDCl₃ and/or DMSO-d₆ solvents.

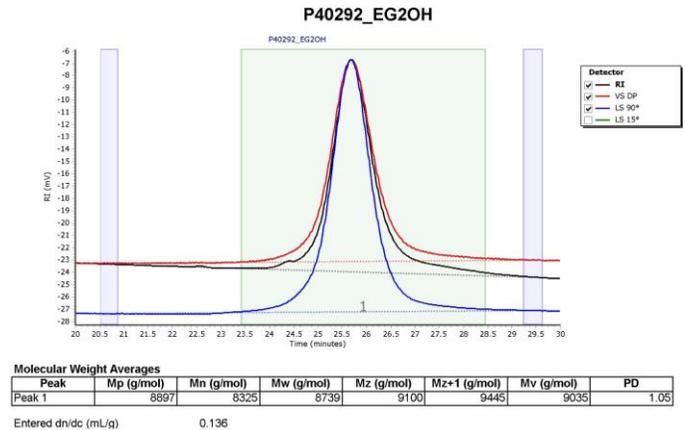
The average molecular weight and polydispersity index were obtained by size exclusion chromatography (SEC) performed on [1] Waters GPC/SEC system equipped with Viskotek TDA-305 triple detector, and using DMF as the eluent; and/or on [2] Agilent 1260 Infinity II multi-detector GPC/SEC system equipped with three columns, and using 2% acetic acid aqueous solution as an eluent.

¹H NMR spectrum of PEG:

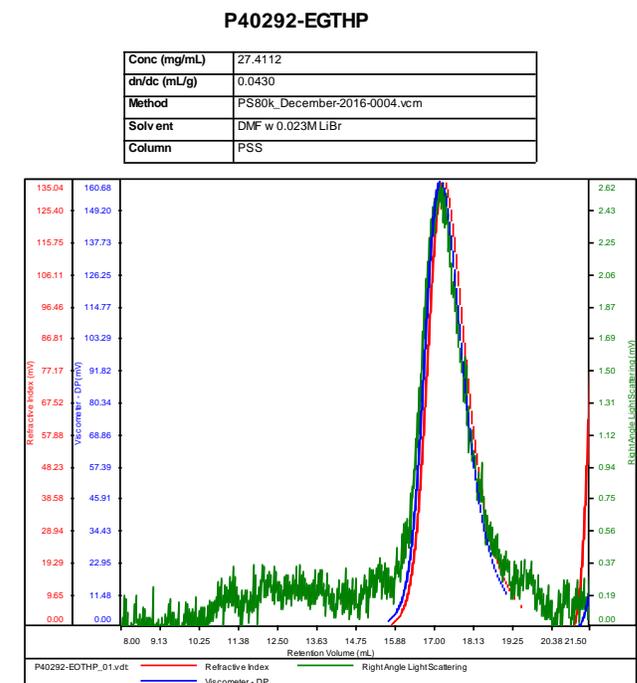


Molecular weight of P40292 polymer as calculated by ¹H NMR is 9,900 g/mol (degree of polymerization: 224).

SEC chromatogram of PEG in water:



SEC chromatogram of PEG in DMF:



Sample	Mn	Mw	Mp	Mw/Mn	IV
P40292-EGTHP_01.vdt	10,106	10,602	9,595	1.049	0.0917