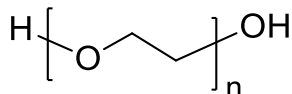


Sample name: Poly(ethylene glycol)

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:**

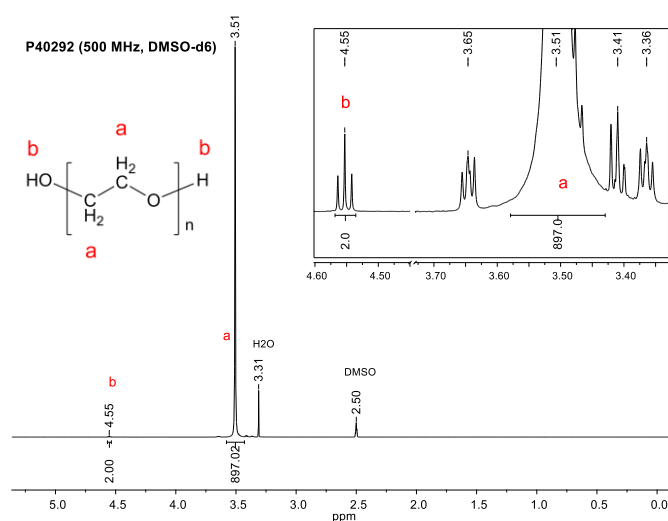
Poly(ethylene glycol) was obtained by living anionic polymerization.

**Characterization:**

The purity and polymer structure were confirmed by  $^1\text{H}$  NMR analysis done on 500 MHz Bruker spectrometer using  $\text{CDCl}_3$  and/or  $\text{DMSO}-d_6$  solvents.

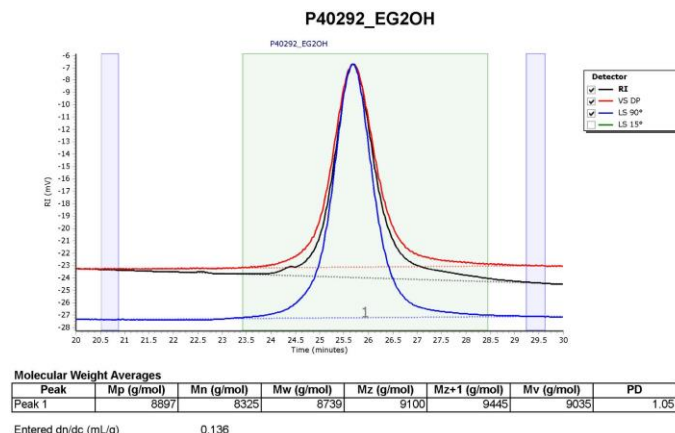
The average molecular weight and polydispersity index were obtained by size exclusion chromatography (SEC) performed on [1] Waters GPC/SEC system equipped with Viskotek TDA-305 triple detector, and using DMF as the eluent; *and/or* on [2] Agilent 1260 Infinity II multi-detector GPC/SEC system equipped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

**$^1\text{H}$  NMR spectrum of PEG:**

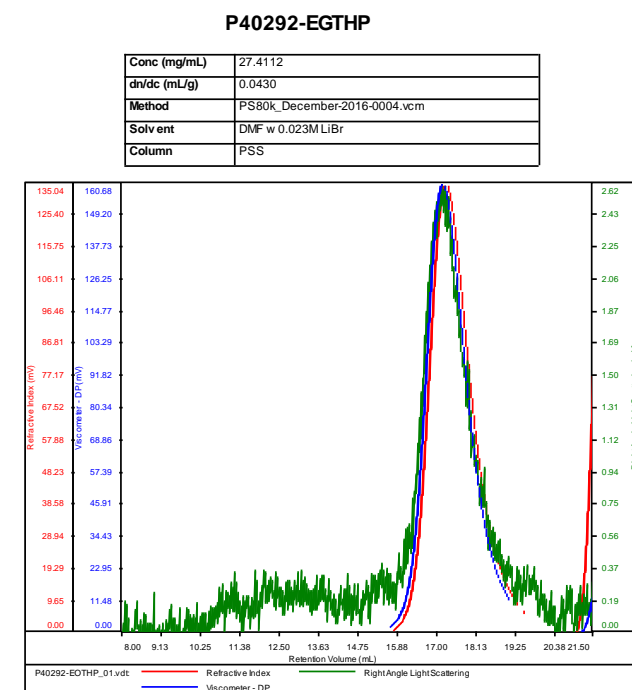


Molecular weight of P40292 polymer as calculated by  $^1\text{H}$  NMR is 9,900 g/mol (degree of polymerization: 224).

**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