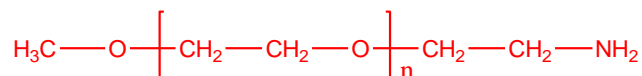


Sample Name:

α Methoxy ω - amino end functionalized
Poly(ethylene glycol)

Sample #: P8683-EGOCH3NH2

Structure:**Composition:**

Mn x 10 ³	PDI	Functionality (NH ₂)
0.55	1.15	> 85%

Synthesis Procedure:

Mesylate end functionalized Poly(ethylene glycol) methyl ether is prepared by living anionic polymerization of ethylene oxide followed by reaction of OH terminated polymethylene glycol methyl ether with methanesulfonyl chloride (mesyl chloride).

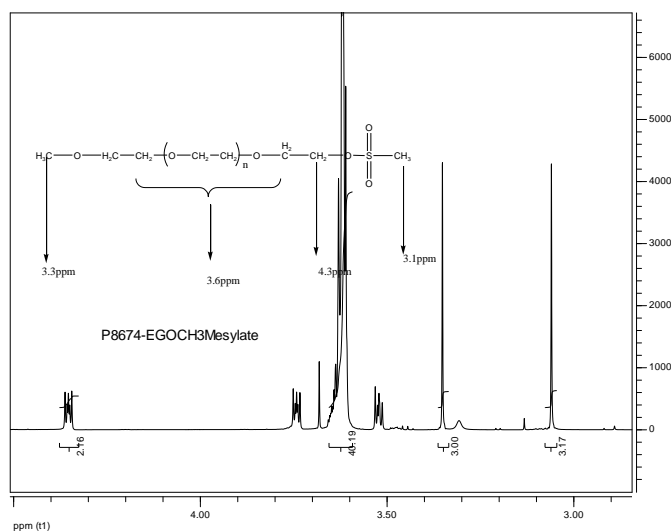
Characterization:

Polymer was analyzed by size exclusion chromatography (SEC) to obtain the molecular weight and polydispersity index (PDI). The end functionality was calculated from ¹H-NMR spectroscopy.

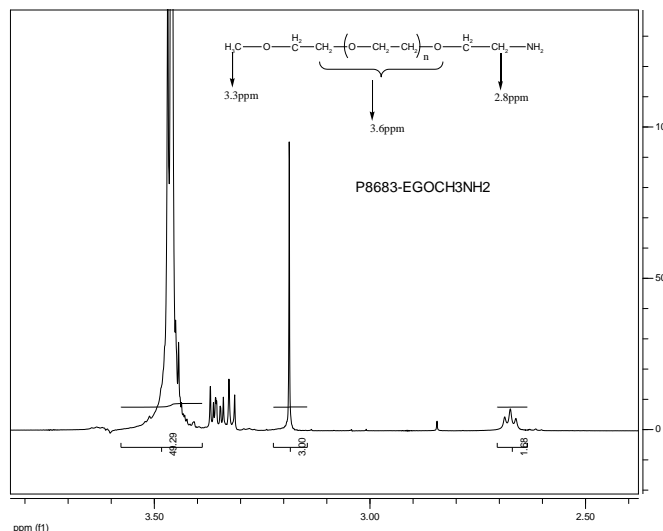
Solubility:

Functionalized Poly(ethylene oxide) is soluble in CHCl₃, THF, and precipitated out from cold diethyl ether.

¹H-NMR Spectrum of the polymer :
PEG-Mesylate

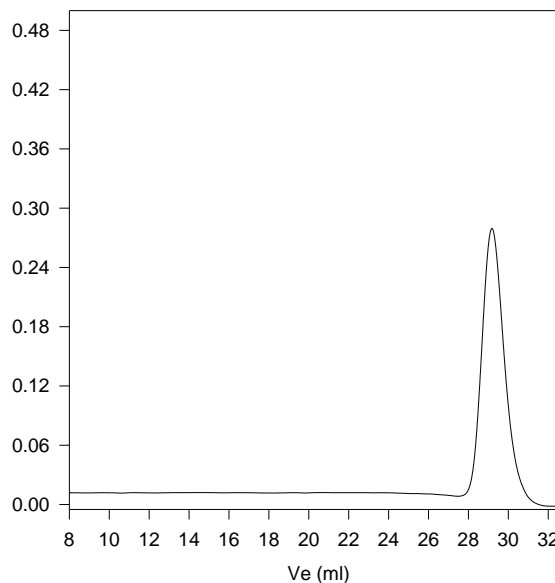


¹H-NMR Spectrum of the polymer :
PEG-OCH3NH2



SEC of the polymer before terminating with mesyl chloride (methane sulfonyl chloride):

P8674-EGOCH3



Size Exclusion Chromatography of Poly(ethylene glycol) methyl ether

M_n=550, M_w=630, Mw/Mn =1.15