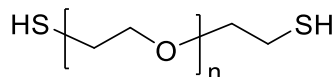


Product Name:

Poly(ethylene glycol), α,ω -bis(thiol)-terminated

Product # P42664-EG2SH

Structure:

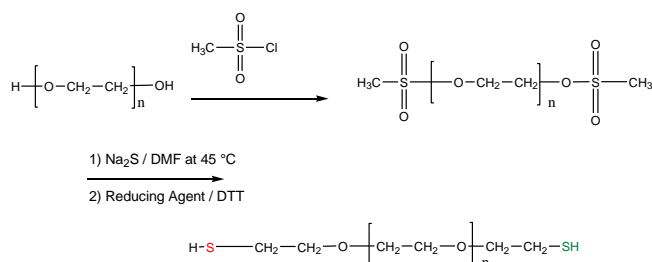


Composition:

$M_n \times 10^3$ (g/mol)	M_w/M_n	-SH functionality
8.0	1.04	> 90%

Synthesis procedure:

The polymer was synthesized by anionic process, and following modifications of terminal -OH to -SH groups.



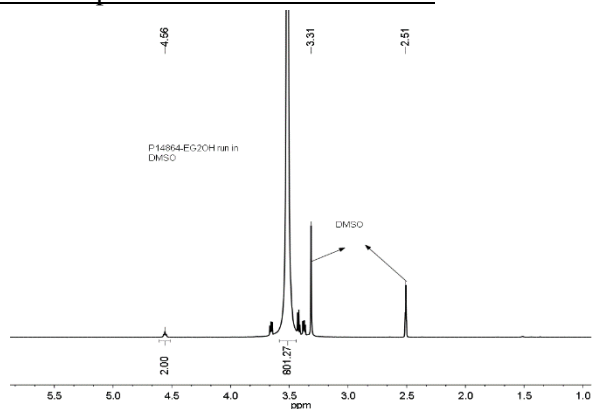
Characterization:

The molecular weight and polydispersity index were determined by size exclusion chromatography (SEC, triple detection method). Functionality of the polymer was calculated by proton NMR, FT-IR spectroscopies or by titration.

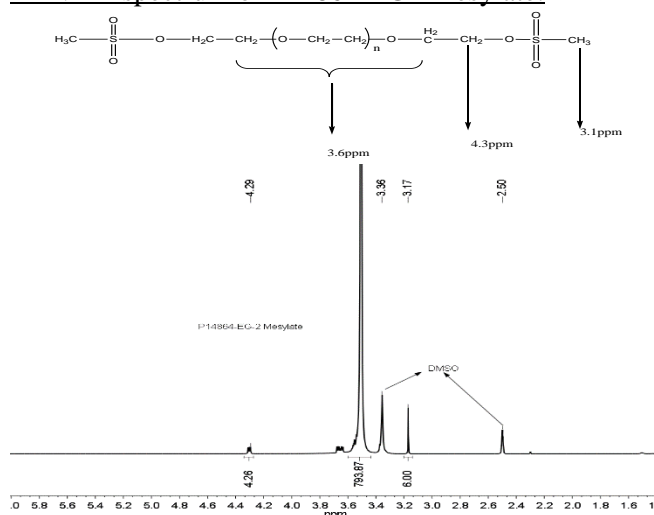
Solubility:

The polymer is soluble in water, methanol and ethanol.

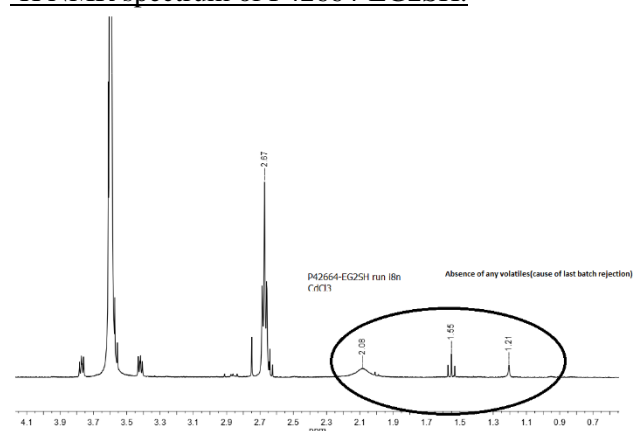
^1H NMR spectrum of P14864-EG2OH:



^1H NMR spectrum of P14864-EG-2mesylate:

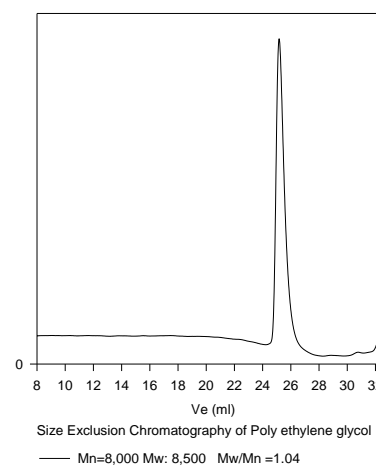


^1H NMR spectrum of P42664-EG2SH:



SEC of the bis-hydroxy-terminated PEG precursor:

EG2OH used for P42485-EG2SH



Reference:

S. K. Varshney, J. X. Zhang, *Apply US patent 09/895,323, 2001*. Heterofunctional Polyethylene glycol and Polyethylene oxide, process for their Manufacture.