

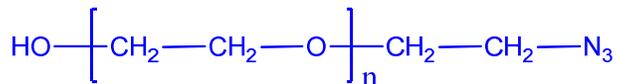
Sample Name:

α -hydroxy- ω -Azide terminated Poly(ethylene glycol)

Or azide terminated Poly ethylene glycol

Sample #: **P6784- EGOHN3**

Structure:



Composition:

Mn x 10 ³	PDI
2.0	1.20
Azide functionality by HNMR	60 %

Synthesis Procedure: In this case the initiator was azido ethoxy ethanol:

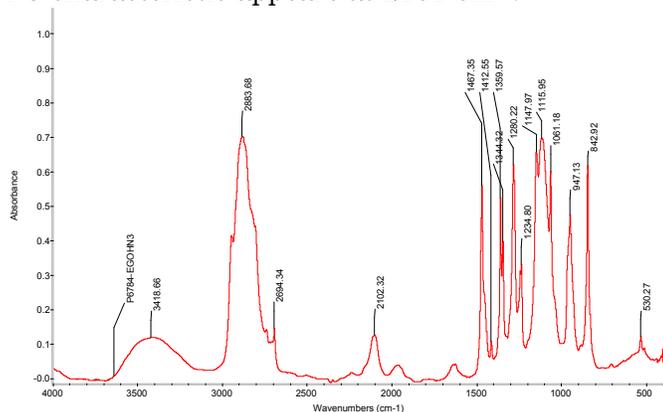
Azide end functionalized Poly(ethylene glycol) is prepared by living anionic polymerization of ethylene oxide, initiated by potassium salts of azido-ethoxy-ethanol.

Characterization:

An aliquot of the poly(ethylene oxide) was analyzed by size exclusion chromatography (SEC) to obtain the molecular weight and polydispersity index (PDI). The functionality of polymer obtained at each step was calculated from ¹H-NMR spectroscopy.

FTIR:

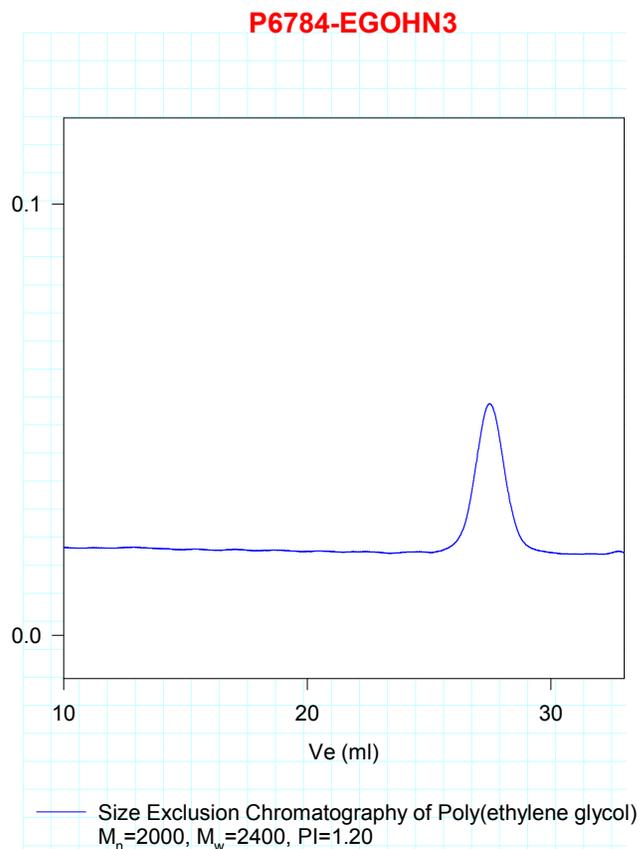
N3 characteristic appears at 2101 cm⁻¹.



Solubility:

N3 end functionalized poly(ethylene oxide) is soluble in CHCl₃, THF and precipitated out from hexanes.

SEC of the polymer :



NMR of α -azide- ω -hydroxy terminated PEG

