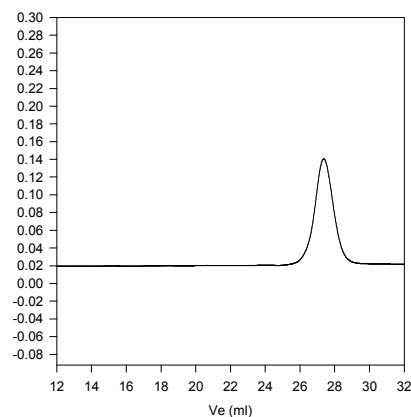
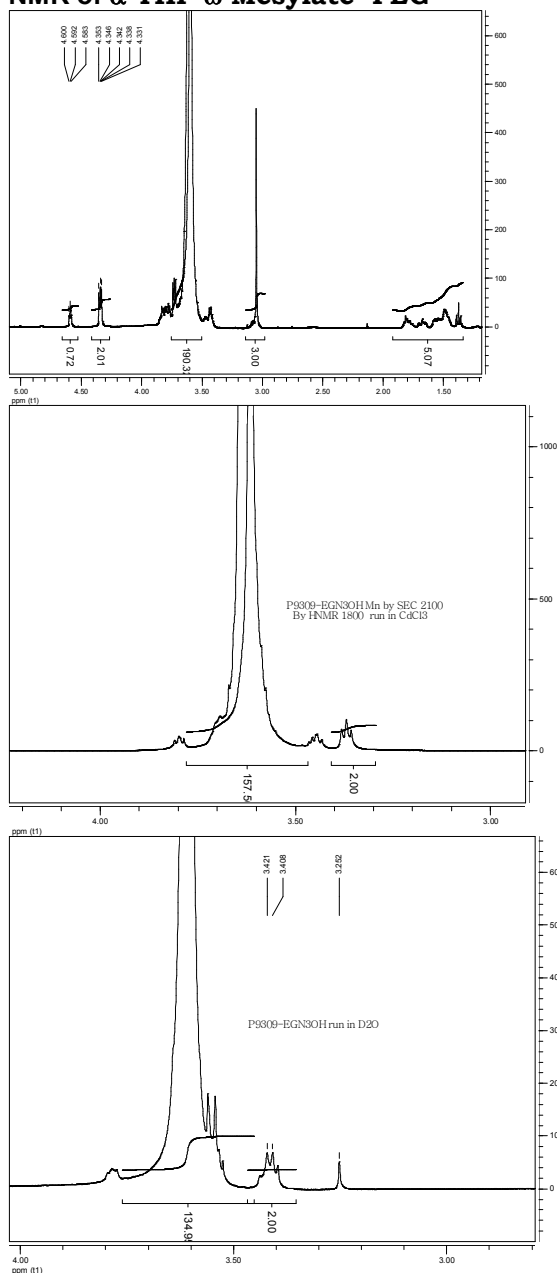


SEC of the polymer :

P9309-EGOHN3



NMR of α -THP- ω -Mesylate PEG



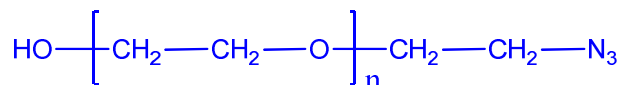
Sample Name:

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

Or azide terminated Poly ethylene glycol

Sample #: P9309- EGOHN3

Structure:



Composition:

$M_n \times 10^3$	PDI
2.1	1.14
Azide functionality by HNMR	>98 %

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

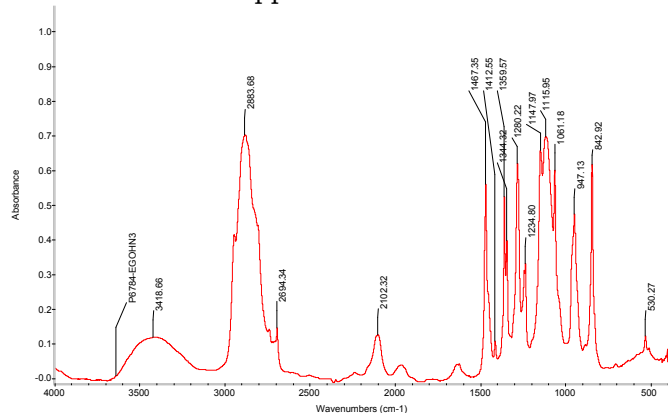
Azide end functionalized Poly(ethylene glycol) is prepared by living anionic polymerization of ethylene oxide, using potassium salt of α -Tetrahydropyranyl- ω -Hydroxyethylene glycol as initiator. Hydroxy end groups were then modified to azide group. At each step of the reaction was followed by its HNMR and FTIR.

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 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 water, $CHCl_3$, THF and precipitated out from hexanes.