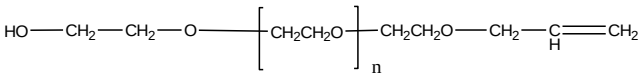
Sample Name:

α-Hydroxy, ω-Allyl Terminated Poly(ethylene glycol)

Sample #: **P42490-EGOHAllyl**

Structure:



Composition:

Mn x 10^3	PDI	Dp	Allyl functionality
0.4	1.08	9	> 98%

Synthesis Procedure:

α -hydroxy, ω-allyl terminated poly(ethylene glycol) was synthesized by anionic living polymerization.

Characterization:

The molecular weight and polydispersity index of this polymer were determined by size exclusion chromatography (SEC) using a Varian liquid chromatograph equipped with a UV and refractive index detector.

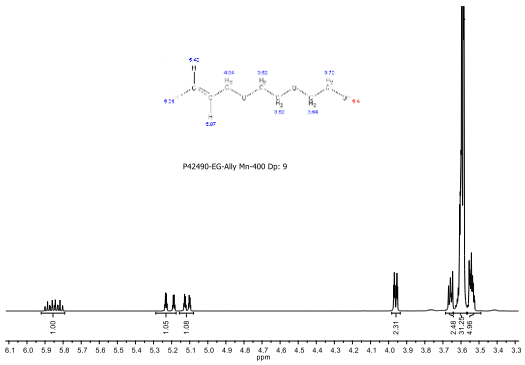
Functionality:

Functionality of the polymer was determined by ^{1}H NMR analysis.

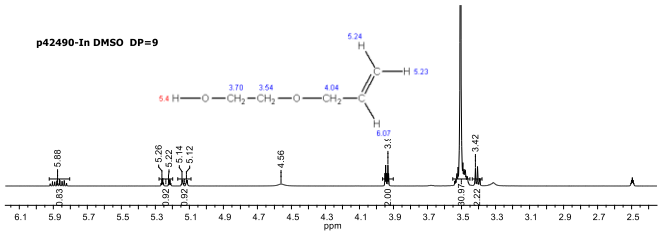
Solubility:

Polymer is soluble in chloroform and THF; it will be also soluble in water, methanol and ethanol. It is precipitated out from cold hexane and ether(-20°C).

^{1}H-NMR spectrum of the product in $CdCl_3$:



^{1}H-NMR spectrum of the product in DMSO at 500MHz:



SEC profile of Poly(ethylene glycol) allyl ether: