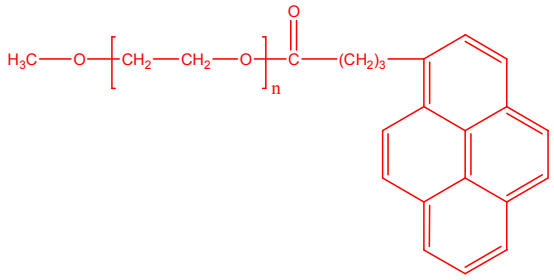
Sample Name:

α-Methoxy-ω-Pyrenyl Terminated Poly(ethylene glycol)

Sample #: **OR210-EGPy**

Structure:

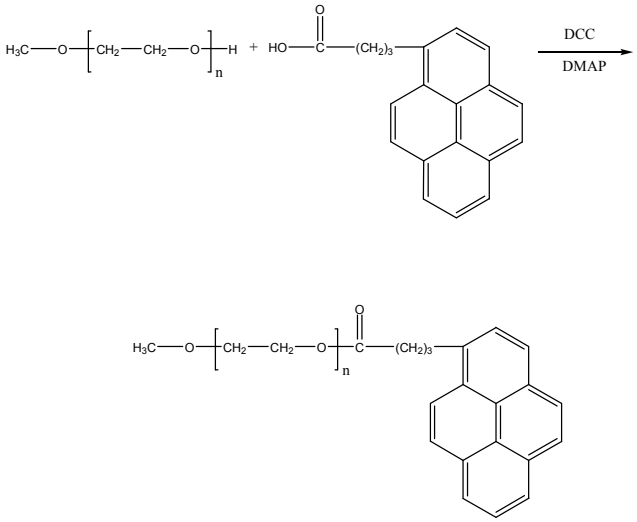


Composition:

Mn x 10^3	PDI
0.75	1.10

Synthesis Procedure:

α-Methoxy-ω-pyrenyl terminated poly(ethylene glycol) was prepared by living anionic polymerization of ethylene oxide using the potassium salt of methanol. The hydroxyl terminal groups of the polymer chains were converted to pyrenyl by chemical modification reactions as illustrated below:



Characterization:

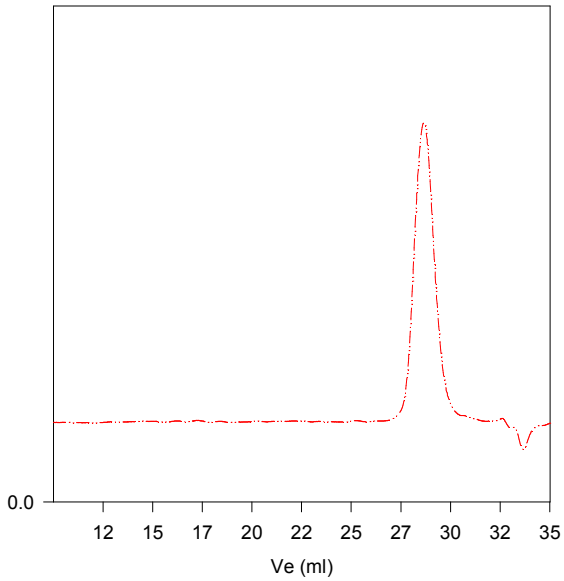
The molecular weight and polydispersity index of this polymer were determined by size exclusion chromatography (SEC) using a Varian liquid chromatograph equipped with a UV and refractive index detector. Polymer functionality was determined by NMR.

Solubility:

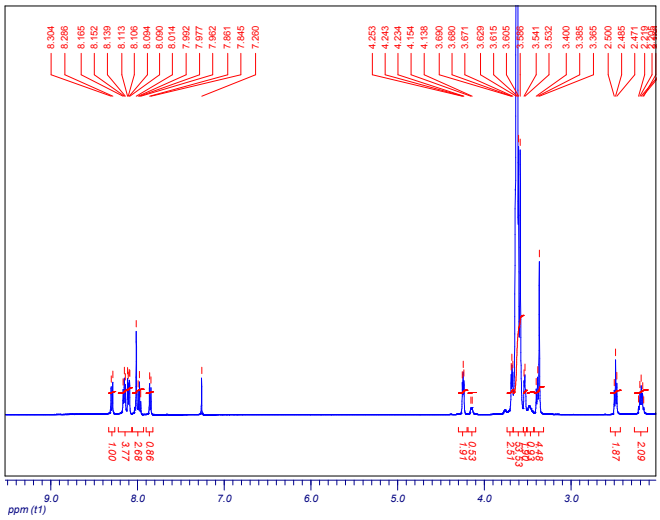
The polymer is soluble in water, chloroform, dichloromethane and acetone etc.

SEC of Sample:

OR210-EGPy



Size exclusion chromatography of α–Methoxy-ω–Pyrenyl terminated Poly(ethylene glycol):

M_n=750, M_w=830, M_w/M_n =1.10

NMR spectrum: