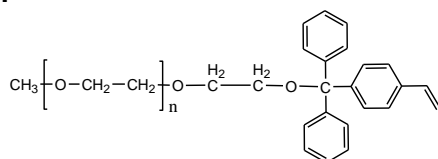


Sample Name: α -Methoxy- ω -vinyl phenyl diphenyloxy –terminated Poly(ethylene oxide)

Sample #: P16283A-mPEG-VPDP

Structure:

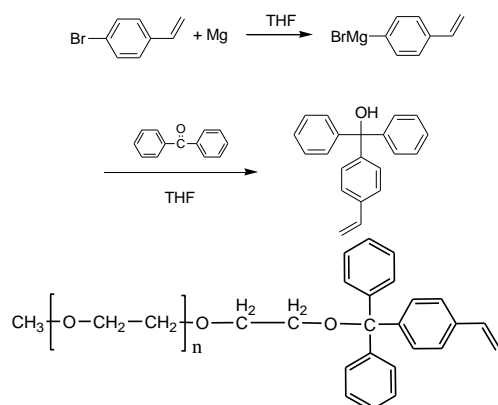


Composition:

$M_n \times 10^3$ mPEG-VPDP	PDI
5.0	1.09
functionality (NMR) $\geq 80\%$	

Synthesis Procedure:

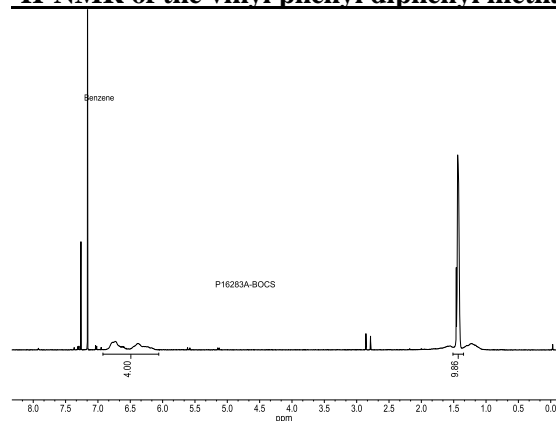
The product was prepared as followed reaction scheme:



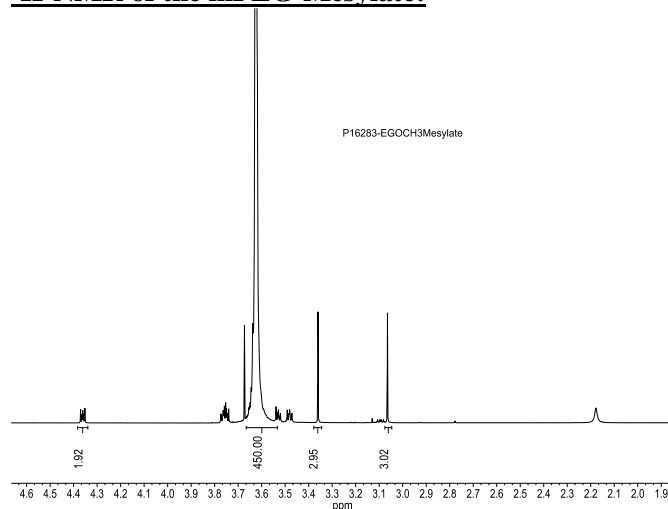
Characterization:

The product was characterized by HNMR.

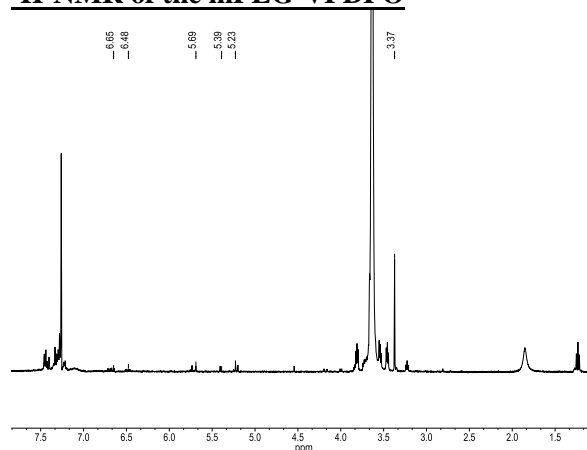
$^1\text{H-NMR}$ of the vinyl phenyl diphenyl methanol:



$^1\text{H-NMR}$ of the mPEG-Mesyate:

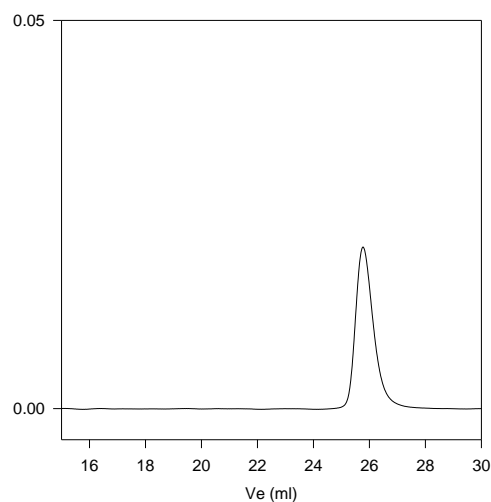


$^1\text{H-NMR}$ of the mPEG-VPDPO



SEC elugram of the product:

P16283A-mPEG-VPDPO



Size exclusion chromatography of polymer :

— $M_n=5000$, $M_w=5500$, $PI=1.09$