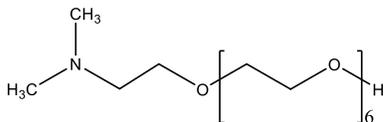


Sample Name:

Poly(ethylene oxide), a-dimethyl amino-terminated

Sample #: **P42996A-1-EG-DMA**

Structure:



Composition:

$M_n \times 10^3$ (g/mol)	M_w/M_n	Dp
0.3	1.04	6

Synthesis Procedure:

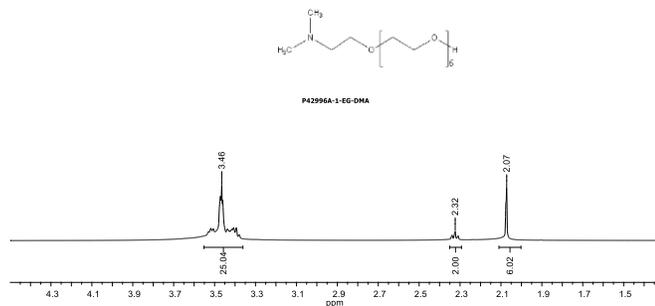
Ethylene oxide was polymerized by living anionic polymerization using potassium salt of N,N dimethyl amino ethanol .

Characterization:

Purity and polymer structure was confirmed by ^1H NMR analysis done on 500 MHz Bruker spectrometer using CDCl_3 and/or DMSO-d_6 solvents.

The average molecular weight and polydispersity index (M_w/M_n) were determined by size exclusion chromatography (SEC) with triple detection, using DMF or THF as an eluent.

^1H -NMR spectrum of polymer in CDCl_3 :



Note: End hydroxy group cannot be seen by NMR in chloroform but can be observed in dimethylsulfoxide.

SEC elugram of functionalized PEG:

Workspace Details
Workspace name
Location
Comments
Created by

Calibration 2020-05-25
C:\ProgramData\Agilent Technologies\GPC\Workspaces\Calibration 2020-05-25\
agilent2 at 10:50:19 AM on May-25-20

Chromatogram Plot

