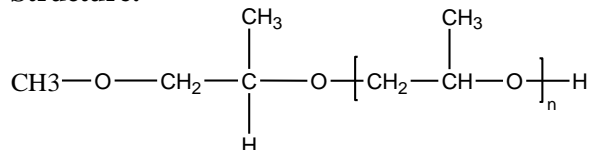


Sample Name:

Poly propylene glycol methyl ether

Sample #: **P42434G-PO-OCH3**

Structure:

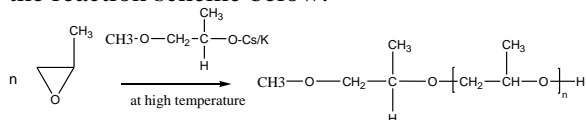


Composition:

$\text{Mn} \times 10^3$	PDI
15.0	1.09

Synthesis Procedure:

Polypropylene oxide is synthesized by anionic polymerization of propylene oxide as illustrated in the reaction scheme below.



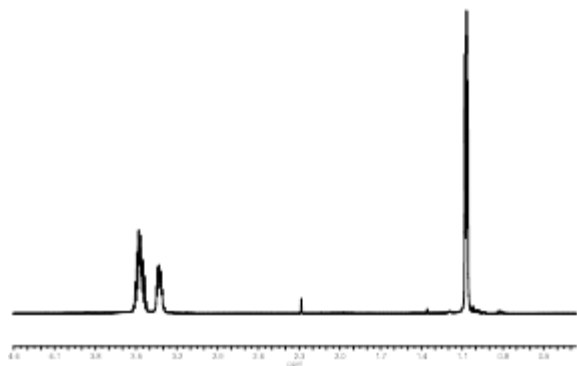
Characterization:

The molecular weight and polydispersity index (PDI) are obtained by size exclusion chromatography (SEC) in THF. SEC analysis was performed on a Varian liquid chromatograph equipped with refractive and UV light scattering detectors. Three SEC columns from Supelco (G6000-4000-2000 HXL) were used with triple detectors from Viscotek Co.

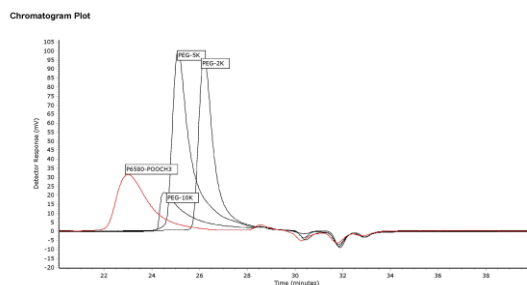
Solubility:

Polymer is soluble in CHCl_3 , methanol, ethanol, THF, and toluene.

HNMR spectrum of the polymer:



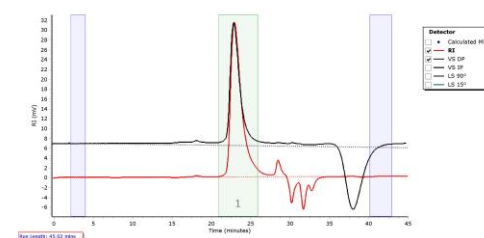
SEC profile of the polymer:



Agilent GPC/SEC Software

P42434G-POOCH3

Chromatogram Plot



Peak	Mp (g/mol)	Mn (g/mol)	Mw (g/mol)	Mz (g/mol)	Mz+1 (g/mol)	Mv (g/mol)	PD
Peak 1	18111	14785	16179	17358	18374	17091	1.094