

Sample Name:

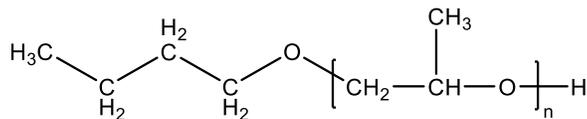
α -Butyl ether-terminated-poly propylene oxide.

or

Poly propylene glycol Butyl ether.

Sample #: P42468-PO-OBu

Structure:

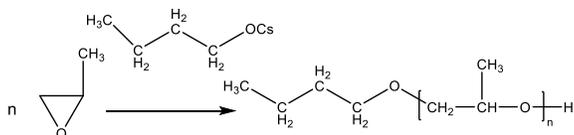


Composition:

| | |
|----------------------|------|
| Mn x 10 ³ | PDI |
| 1.8 | 1.09 |

Synthesis Procedure:

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



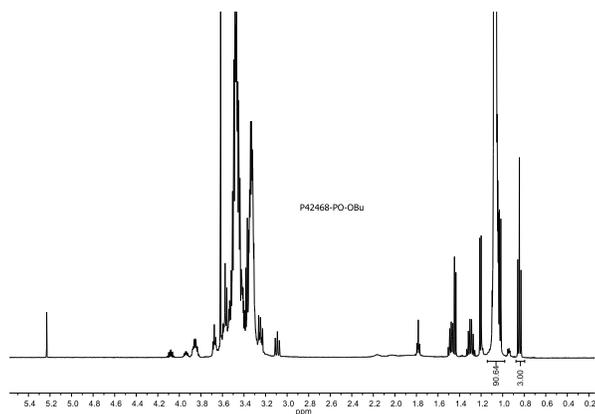
Characterization:

The molecular weight and polydispersity index (PDI) are obtained by size exclusion chromatography and ¹H NMR data analysis.

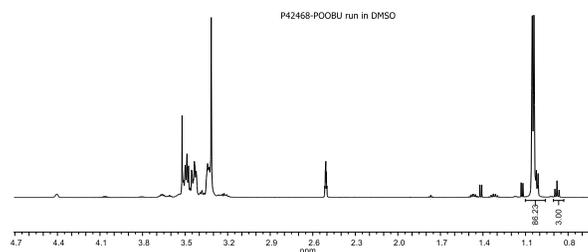
Purification:

Polymer purified by passing through Al₂O₃ packed column to remove the catalytic impurities.

¹H NMR spectrum of the Sample in CdCl₂:



¹H NMR spectrum of the Sample in DMSO:



SEC elugram of Homopolymer:

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

