

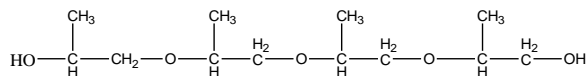
### Sample Name:

$\alpha,\omega$ - dihydroxy terminated-polypropylene glycol Oligomer

Pentamer

Sample #: **P9822D**

### Structure:

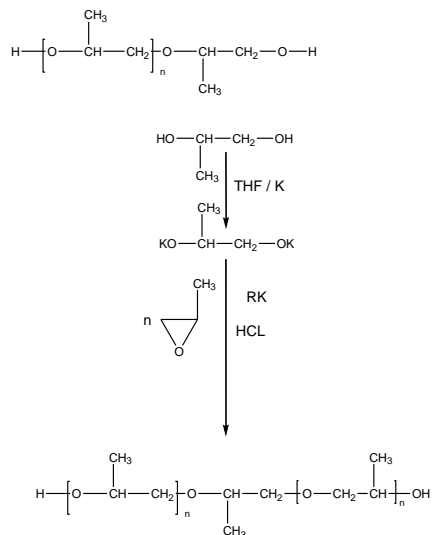


### Composition:

Mn x 10 <sup>3</sup>	PDI
0.308	1.06

### Synthesis Procedure:

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

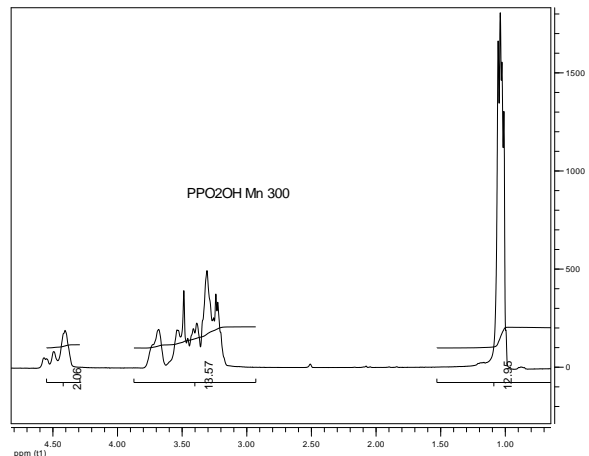


### Characterization:

The molecular weight and polydispersity index (PDI) are obtained by size exclusion chromatography.

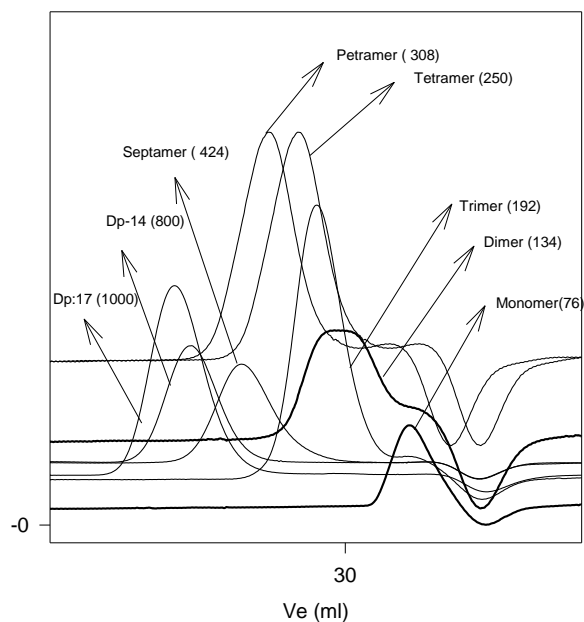
### Purification:

The reaction mixture is filtered to remove the precipitated KCl after which the solvent is removed under reduced pressure.



### SEC of Homopolymer:

### Oligomers of Polypropylene glycol



Size exclusion chromatography of oligomers:

1. Monomer (Mass 76)
2. Dimer (Mn: 134)
3. Trimer: Mn (192)
4. Tetramer (Mn 250)
5. Pentamer (Mn 308)
6. Septamer (Mn 424)
7. Dp=14 (Mn 800)
8. Dp: 17 (Mn 1000)