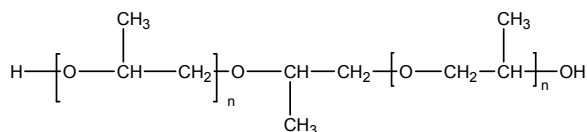


Sample Name:

**$\alpha,\omega$ - dihydroxy terminated-polypropylene oxide or Poly propylene glycol**

Sample #: **P10755-PO2OH**

**Structure:**

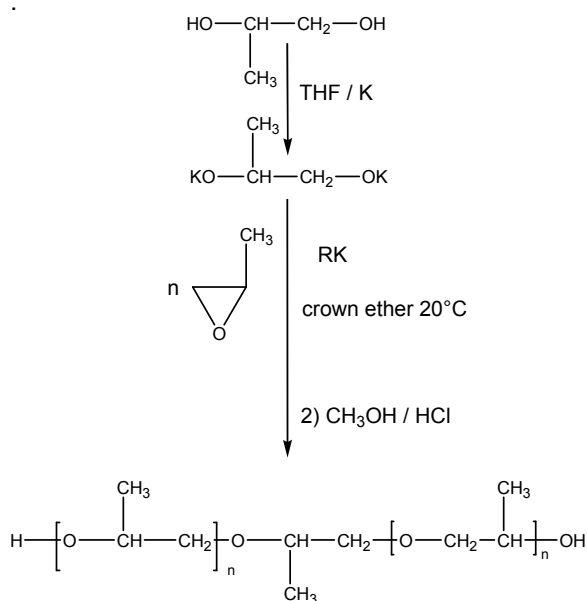


**Composition:**

$M_n \times 10^3$	PDI
8.5	1.24

**Synthesis Procedure:**

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



**Characterization:**

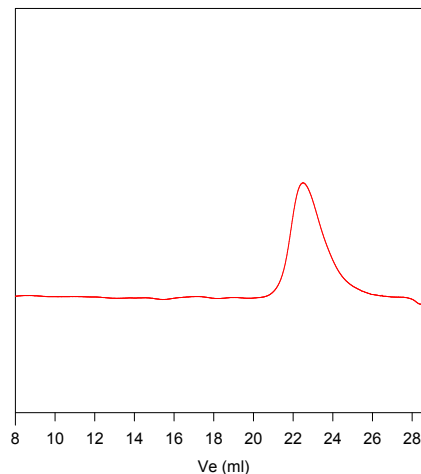
The molecular weight and polydispersity index (PDI) are obtained by size exclusion chromatography.

**Purification:**

The reaction mixture is filtered to remove the precipitated KCl after which the solvent is removed under reduced pressure. The polymer is then re dissolved in iso-octane, and recover after keeping the solution at  $-10^\circ\text{C}$ .

**SEC of Homopolymer:**

**P10755-PO2OH**



Size Exclusion Chromatography of Dihydroxy Terminated Poly(propylene oxide)  
 $M_n=8,500$ ,  $M_w=10,500$ ,  $PI=1.24$