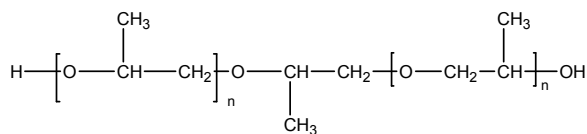


Sample Name:

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

Sample #: **P9874-PO2OH**

**Structure:**

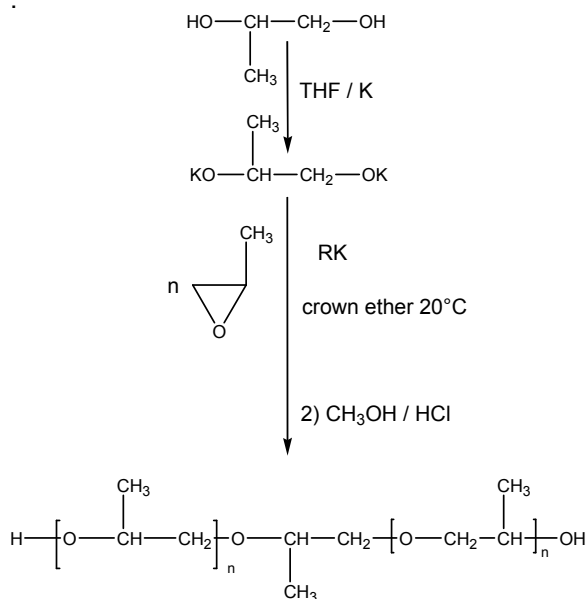


**Composition:**

$M_n \times 10^3$	PDI
1.8	1.09

**Synthesis Procedure:**

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



**Characterization:**

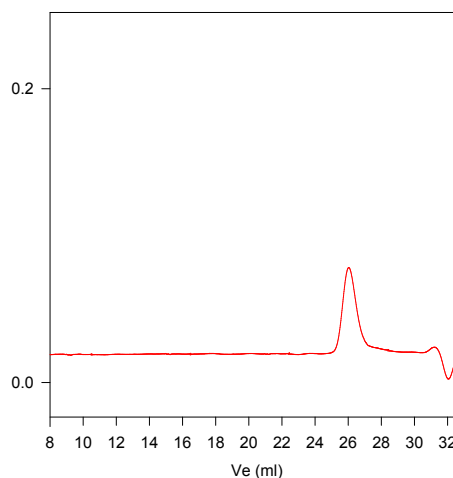
The molecular weight and polydispersity index (PDI) are obtained by size exclusion chromatography.

**Purification:**

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

**SEC of Homopolymer:**

**P9874-PO2OH**



Size Exclusion Chromatography of Dihydroxy Terminated Poly(propylene glycol)  
 $M_n=1800$ ,  $M_w=1900$ ,  $PI=1.09$