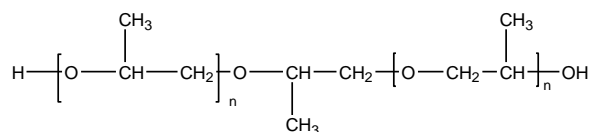


Sample Name:

**α,ω - dihydroxy terminated-polypropylene oxide
or Poly propylene glycol**

Sample #: **P4329-PO2OH**

Structure:

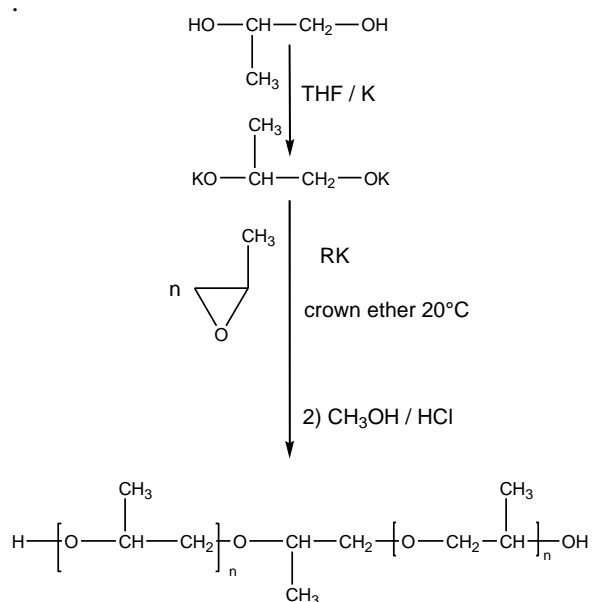


Composition:

$M_n \times 10^3$	PDI
5.0	1.15

Synthesis Procedure:

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



Characterization:

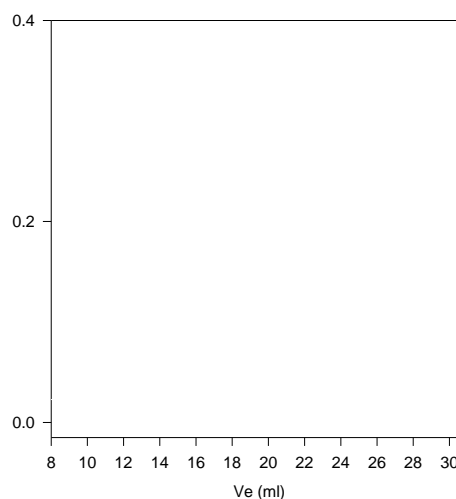
The molecular weight and polydispersity index (PDI) are obtained by size exclusion chromatography.

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 recovers after keeping the solution at -10 oC

SEC of Homopolymer:

P4329-PO2OH



Size Exclusion Chromatography of Dihydroxy Terminated Poly(propylene oxide)

$M_n=5000$, $M_w=5800$, $PI=1.15$