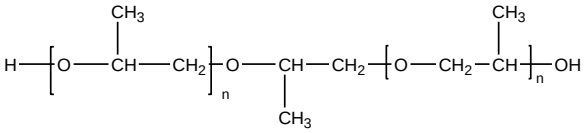
Sample Name:

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

Sample #: **P9795-PO2OH**

Structure:



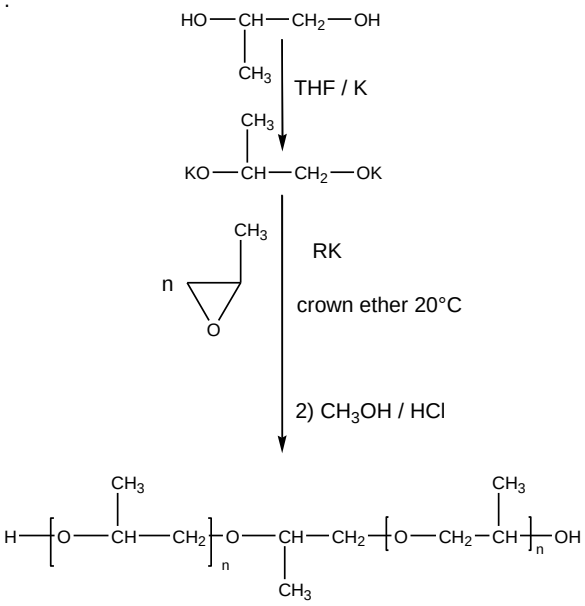
Composition:

Mn x 10^3	PDI
3.5	1.09

Synthesis Procedure:

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

.



Characterization:

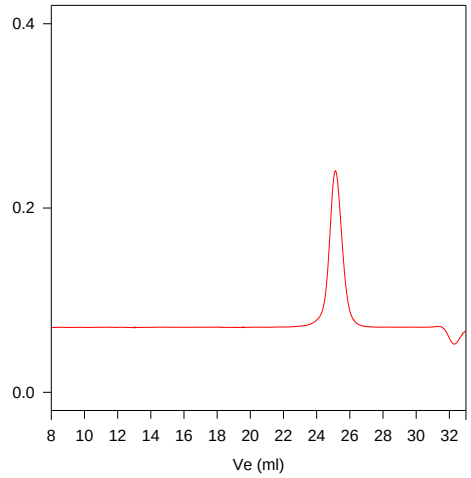
The molecular weight and polydispersity index (PDI) are obtained by size exclusion chromatography.

Purification:

The reaction mixture is filtered to remove the precipitated KCl after which the solvent is removed under reduced pressure. The polymer is then re dissolved in iso-octane, and recover after keeping the solution at -10 oC.

SEC of Homopolymer:

P9795-PP2OH



Size Exclusion Chromatography of Dihydroxy Terminated Poly(propylene glycol)
M_n =3500, M_w =3800, PI=1.09