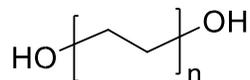


Sample Name:
Poly(ethylene), α,ω -bis(hydroxy)-terminated

Product #: P43852A-E2OH

Structure:



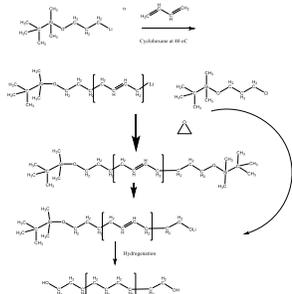
Composition:

Mn x 10 ³	PDI
3.0	1.02

1,4 Contents of its precursor PBd: 90%

Synthesis Procedure:

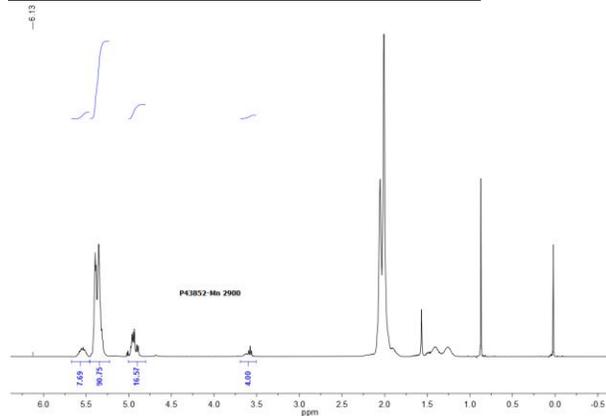
1,4-rich microstructure addition dihydroxy terminated polybutadiene was prepared by anionic living polymerization of butadiene in a polar solvent such as cyclohexane. The following reaction scheme shows how the product was prepared:



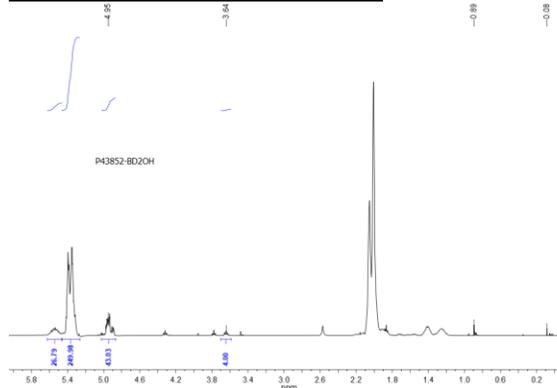
Characterization:

The product was characterized by size exclusion chromatography (SEC) and ¹H NMR data analysis.

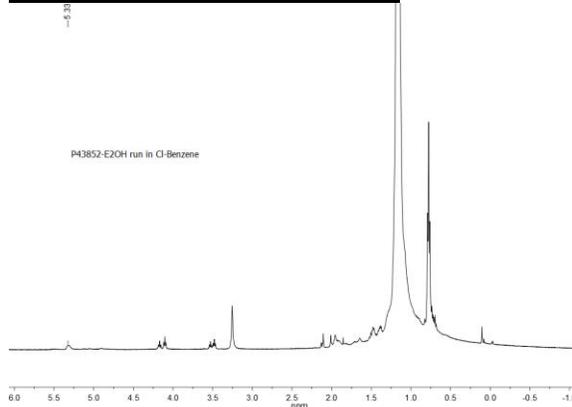
¹H-NMR spectrum of the Product: Tert Butyldimethylsiloxy OH terminated:



Cleavage of tert. Butyl Dimethylsiloxy end group using (Bu)₄NF in THF:

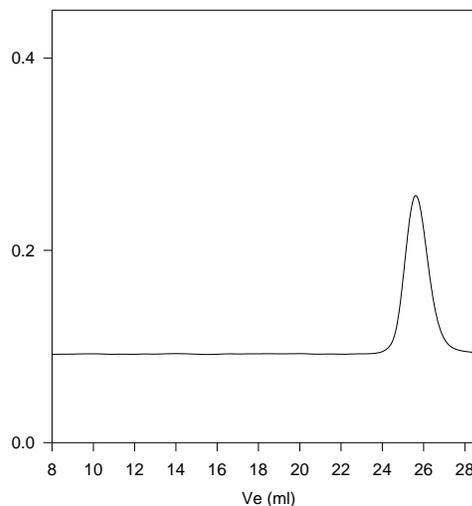


¹H-NMR of the polymer PE2OH run in Chloro Benzene at Room Temperature



SEC profile of Bd2OH Sample:

P43852-BdOH (1,2 addition)



Size exclusion chromatography of poly(butadiene-b-ethylene oxide):
 — 1,4 rich polybutadiene M_n=2,900, M_w=3,000, PI=1.02