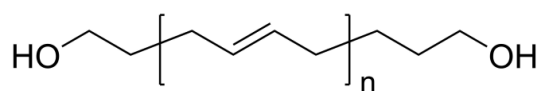


Sample Name:
Poly(1,4-butadiene), α,ω -bis(hydroxy)-terminated

Sample #: **P43850-Bd2OH**

Structure:

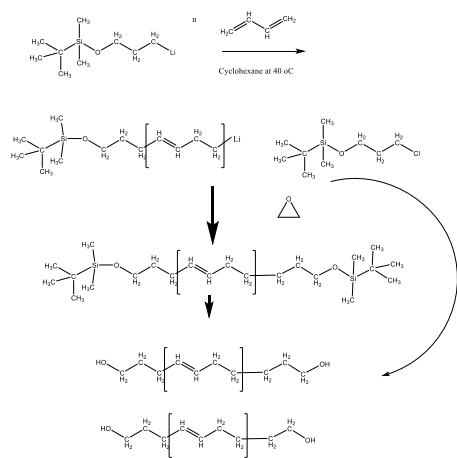


Composition:

Mn x 10 ³	PDI
1.2	1.02
1,4 Contents 90%	

Synthesis Procedure:

1,4-rich microstructure addition dihydroxy terminated polybutadiene was prepared by anionic living polymerization of butadiene in apolar solvent such as cyclohexane.



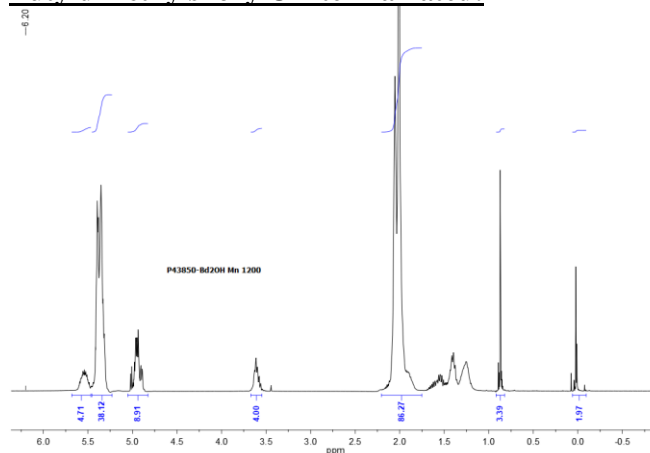
Characterization:

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

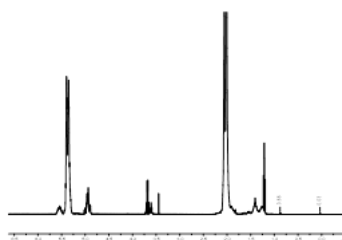
Solubility:

Hydroxy terminated polybutadiene is soluble in THF, toluene, hexane, cyclohexane and CHCl₃. It is also soluble in methanol, ethanol.

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

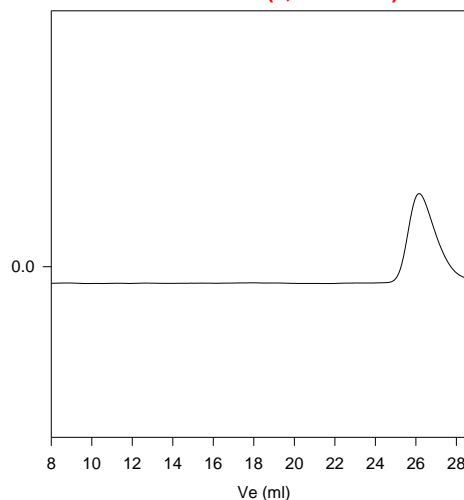


Cleavage of tert.Butyl Dimethylsiloxy end group using (Bu)₄NF in THF:



SEC profile of the Sample:

P43850-Bd2OH (1,4 addition)



Size exclusion chromatography of poly(butadiene)
 — Polybutadiene M_n=1,200, M_w=1,300, PI=1.02