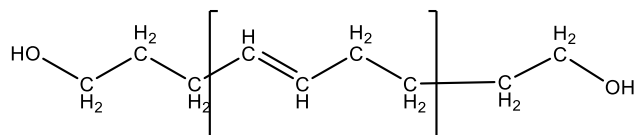


Sample Name:
Poly(1,4-butadiene), α,ω -bis(hydroxy)-terminated

Sample #: P43298-Bd2OH

Structure:

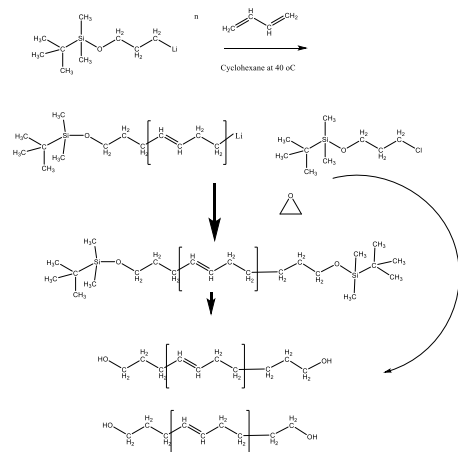


Composition:

Mn x 10 ³	PDI
2.0	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 a polar solvent such as cyclohexane.



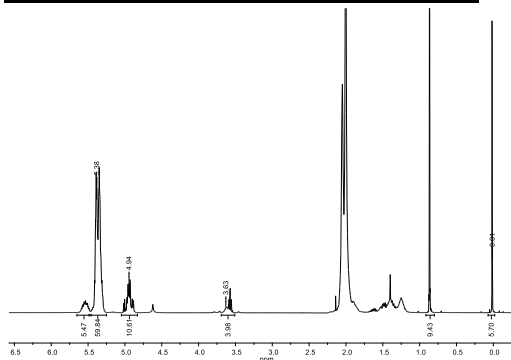
Characterization:

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

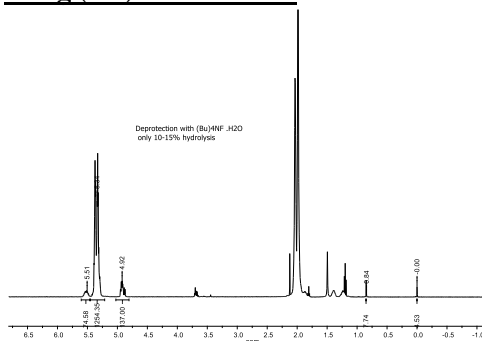
Solubility:

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

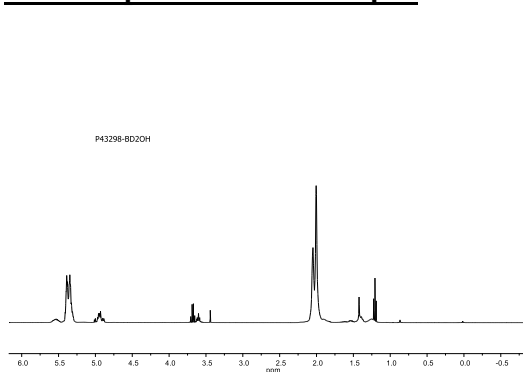
¹H-NMR spectrum of the Product: Tert Butyldimethylsiloxy OH terminated:



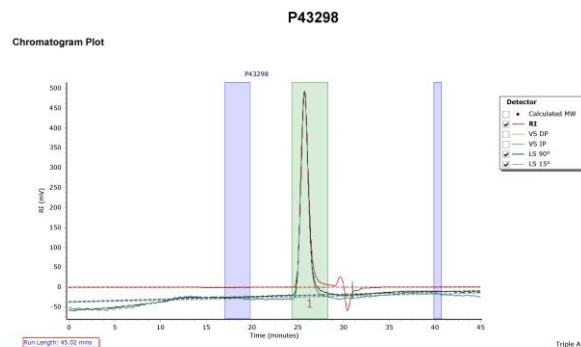
Cleavage of tert. Butyl Dimethylsiloxy end group using (Bu)₄NF in THF:



¹H NMR spectrum of the Sample:



SEC elugram of the Sample:



Peak	Mp (g/mol)	Mn (g/mol)	Mw (g/mol)	Mz (g/mol)	Mz+1 (g/mol)	Mv (g/mol)	PD
Peak 1	2170	2087	2125	2157	2186	0	1.018