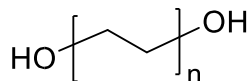


Sample Name:

**Poly(ethylene),  $\alpha,\omega$ -bis(hydroxy)-terminated**

Product #: **P43298CC-E2OH**

**Structure:**



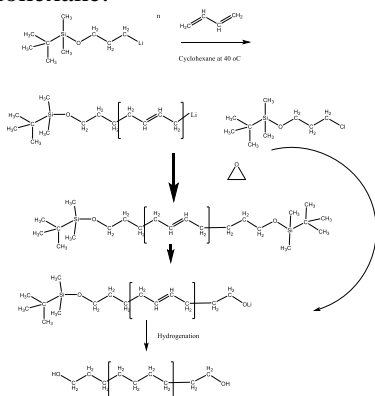
**Composition:**

Mn x 10 <sup>3</sup>	PDI
8.0	1.01

1,4 Contents: 90%
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**Synthesis Procedure:**

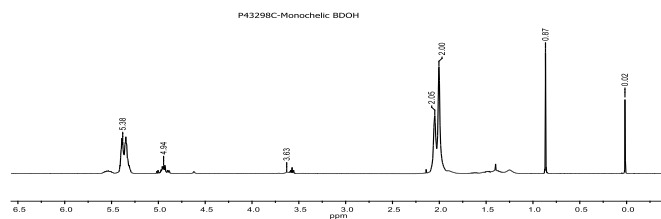
Hydroxy-end functionalized polyethylene was prepared by hydrogenation of OH-terminated poly(1,4-butadiene). 1,4-rich microstructure addition dihydroxy terminated polybutadiene was prepared by anionic living polymerization of butadiene in a polar solvent such as cyclohexane.



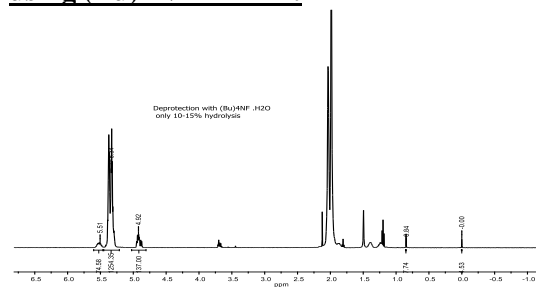
**Characterization:**

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

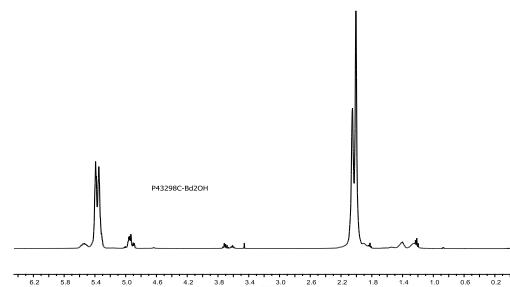
**<sup>1</sup>H-NMR spectrum of the Product: Tert Butyldimethylsiloxy OH terminated:**



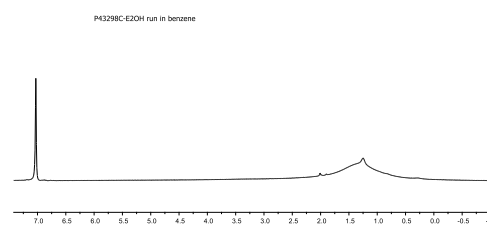
**Cleavage of tert.Butyl Dimethylsiloxy end group using (Bu)<sub>4</sub>NF in THF:**



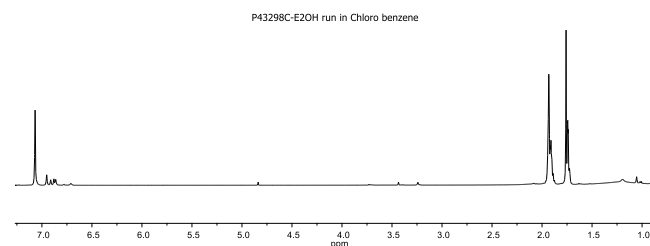
**H NMR spectrum of the Bd2OH Sample:**



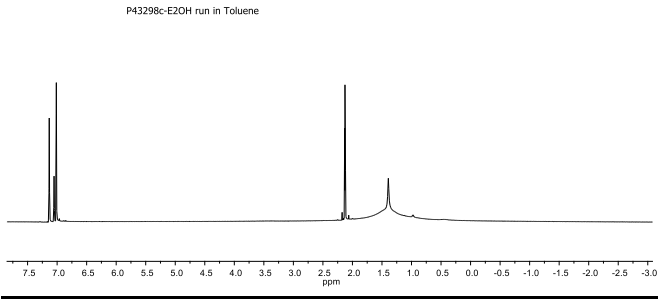
**HNMR spectrum of the PE-2OH sample run in Benzene at room temperature:**



**HNMR spectrum of the PE-2OH sample run in Chloro Benzene at room temperature**



**HNMR spectrum of the PE-2OH sample run in toluene at room temperature**



**SEC elugram of the Bd2OH Sample:**

