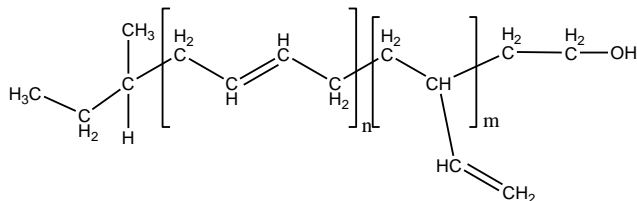


Sample Name: Hydroxy Terminated Polybutadiene,
1, 2-microstructure

Sample #: P40463-BdOH

Structure:



Composition:

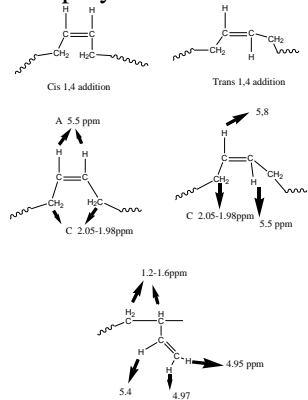
| | |
|----------------------|------|
| Mn x 10 ³ | 1.7 |
| PDI | 1.05 |
| 1,2-microstructure | 90% |
| 1,4-microstructure | 10% |

Synthesis Procedure:

Hydroxy-terminated polybutadiene was prepared by anionic living polymerization of butadiene in non-polar solvent followed by termination with ethylene oxide.

Characterization:

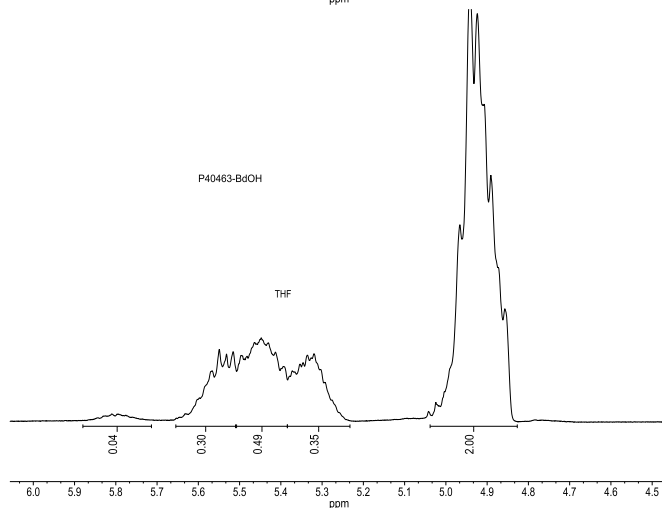
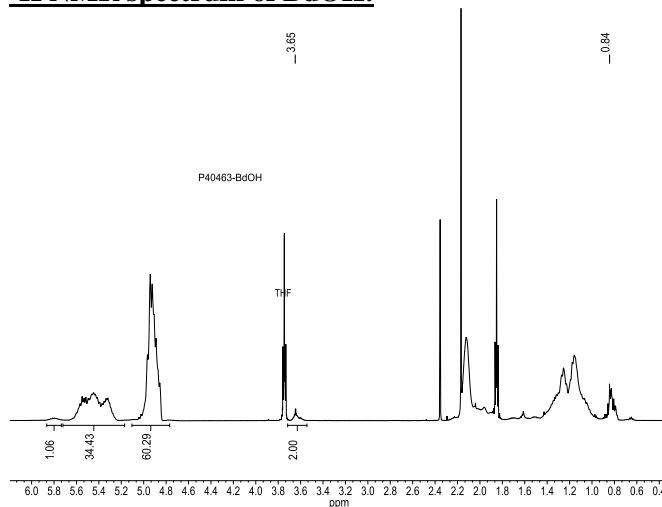
The polymer was characterized by ¹H NMR and SEC.



Solubility:

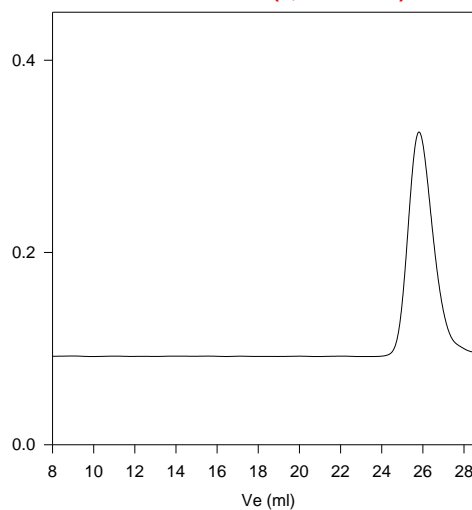
Polymer is soluble in DMF, THF, toluene, hexane, cyclohexane and CHCl₃.

¹H NMR spectrum of BdOH:



SEC elugram of BdOH:

P40463-BdOH (1,2 addition)



Size exclusion chromatography of poly(butadiene):

— 1,2 rich polybutadiene M_n=1,700, M_w=1,800, PI=1.05