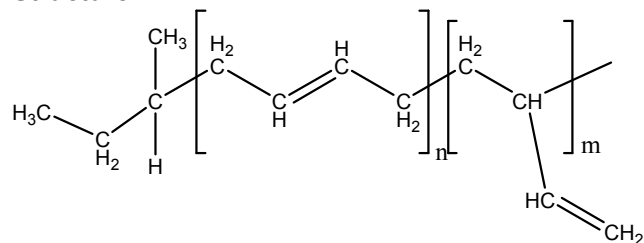


Sample Name: **Polybutadiene (57% of 1,2 and 43% of 1,4 microstructure)**  
 Sample #: **P19298-Bd**

### Structure:



### Composition:

Mn x 10 <sup>3</sup>	PDI
2.5	1.03

PBd 1,2-addition	57 %
PBd 1,4-addition	43%

### Synthesis Procedure:

The polybutadiene was prepared by anionic living polymerization of butadiene in non-polar/polar media.

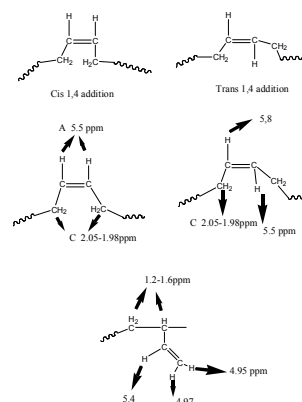
### Characterization:

By GPC and HNMR.

**Microstructure:** The ratio between 1,4- and 1,2-addition was calculated by <sup>1</sup>H NMR spectroscopy.

### Solubility:

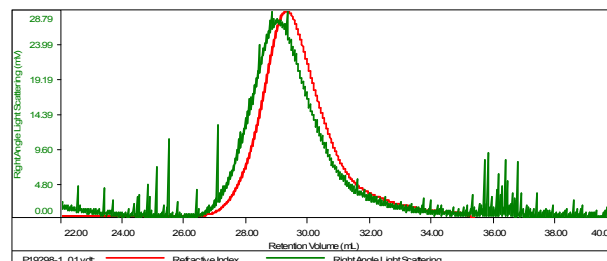
Polybutadiene is soluble in DMF, THF, toluene, hexane, cyclohexane and CHCl<sub>3</sub>. It precipitates from methanol, ethanol and water.



### SEC of Sample:

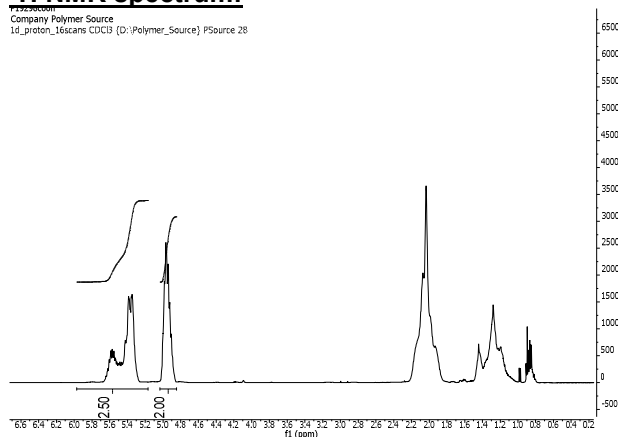
Sample ID: P19298-1-BdOH

Concentration (mg/mL)	49.7889
Sample elvdc (mL/g)	0.1270
Method File	PS80K-May20-2015-0000.vcm
Column Set	3x PL 1113-6300
Solvent	THF



Sample	MW Number Average (Da)	MW Weight Average (Da)	MW at Peak (Da)	Polydispersity	Intrinsic Viscosity (dL/g)
P19298-1_01.vcl	2,527	2,611	2,605	1.033	0.1854

### <sup>1</sup>H NMR spectrum:



### FTIR spectrum:

