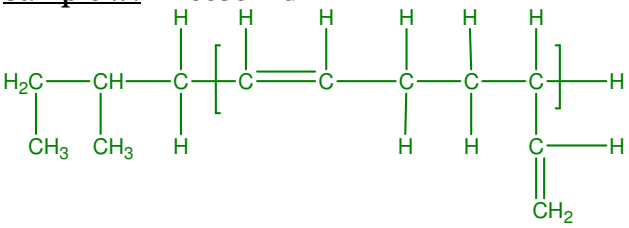
Sample Name: Polybutadiene (rich in 1,4 microstructure) (1,2=46% , 1,4 = 44%)

Sample #: P18858-Bd



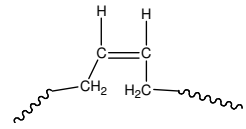
Composition:

Mn x 10^3	PDI
388.5	1.10
1,2 addition : 1,4 addition	46: 44
Cis 1,4 and trans 1,4	55:45

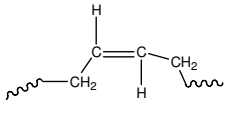
Synthesis Procedure:

Polybutadiene (1,2-rich) is obtained by living anionic polymerization in cyclohexane with a known amount of THF using secBuLi as the initiator.

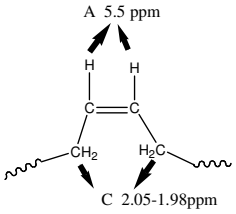
H NMR:

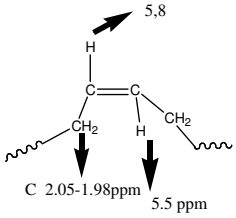


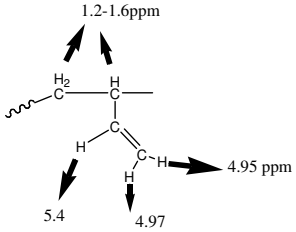
Cis 1,4 addition

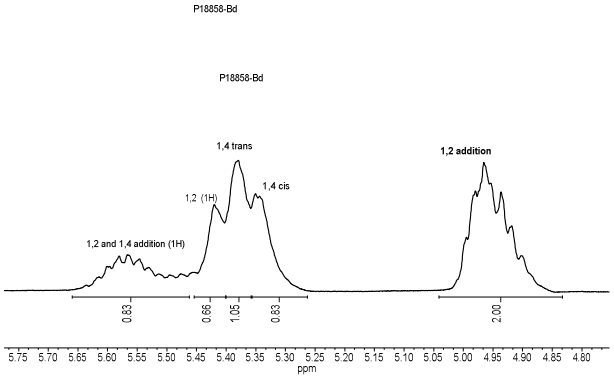


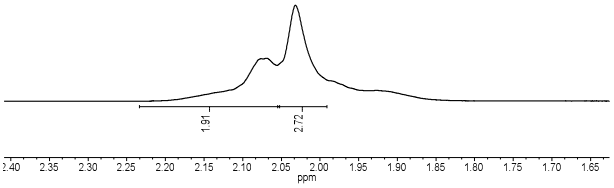
Trans 1,4 addition











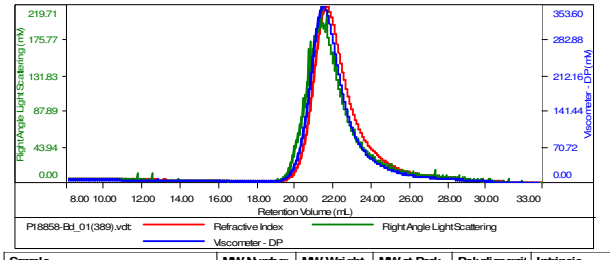
Characterization:

BY size exclusion chromatography (SEC) in THF. Polymer microstructure can be confirmed by ^{1}H-NMR .

SEC:

Sample ID: P18858-Bd

Concentration (mg/mL)	7.5835
Sample dn/dc (mL/g)	0.1250
Method File	PS80K-0923-2014-0000.vcm
Column Set	3x PL 1113-6300
Solvent	THF



Sample	MW Number Average (Da)	MW Weight Average (Da)	MW at Peak (Da)	Polydispersi	Intrinsic Viscosity (dL/g)
P18858-Bd_01(389).vdt	388,318	427,411	403,955	1.101	2.1990