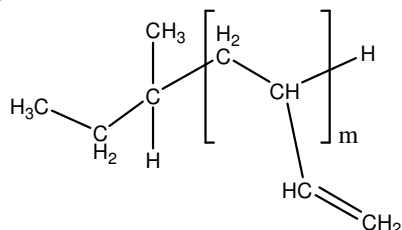


**Sample Name: Polybutadiene (1,2-rich microstructure)**

**Sample #: P19660-Bd**

**Structure:**



**Composition:**

Mn x 10 <sup>3</sup>	PDI
9.5	1.04

PBd 1,4-addition	<5 %
PBd 1,2-addition:	95 %

**Synthesis Procedure:**

1,2-addition polybutadiene was prepared by anionic living polymerization of butadiene in non-polar/polar media.

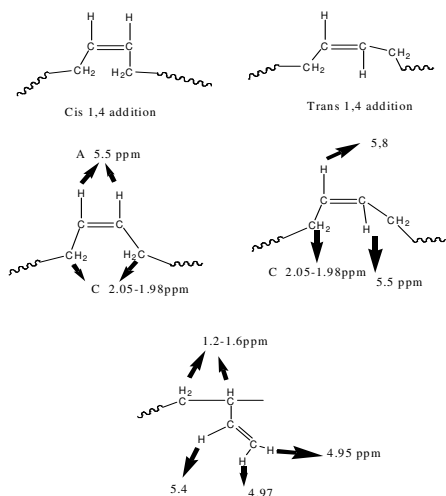
**Characterization:**

The polymer was characterized by SEC and <sup>1</sup>H-NMR.

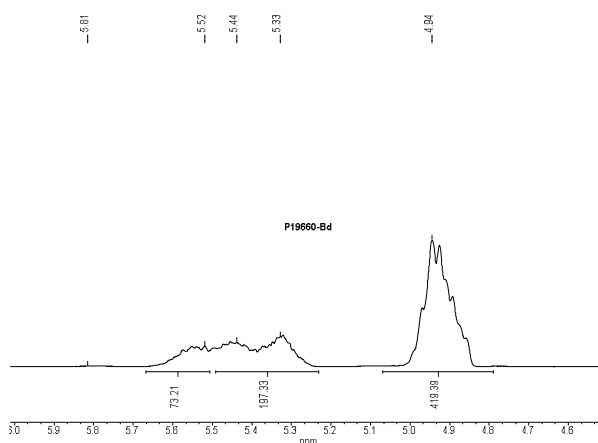
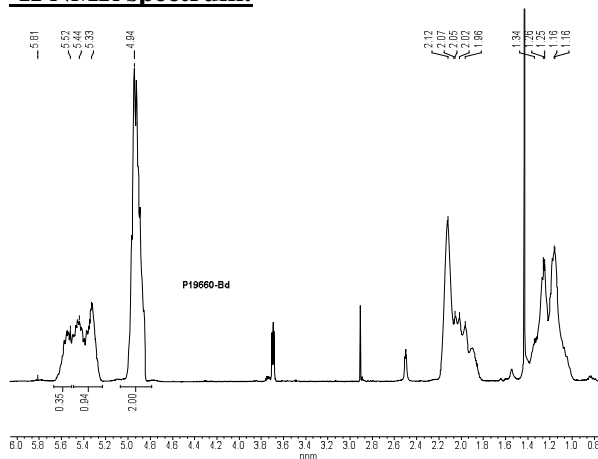
**Microstructure:** The ratio between 1,4- and 1,2-addition was calculated by <sup>1</sup>H NMR spectroscopy.

**Solubility:**

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



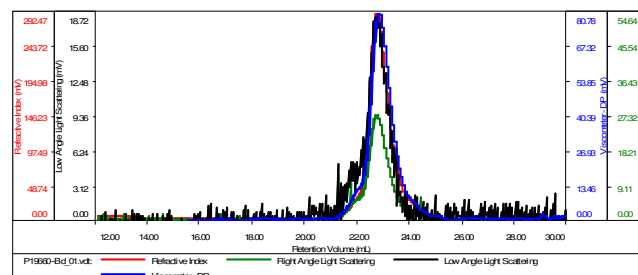
**<sup>1</sup>H NMR spectrum:**



**SEC elugram:**

**Sample ID: P19660-Bd**

Concentration (mg/mL)	2.1644
Sample dn/dc (mL/g)	0.1250
Method File	PS80K-June30-2015-0000.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)
P19660-Bd_01.vcl	9,485	9,856	9,412	1.039	1.0980