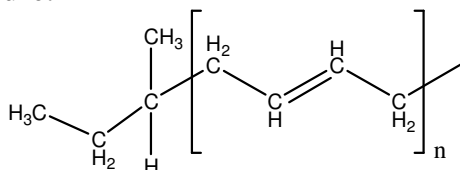


**Sample Name:** Polybutadiene (1, 4-rich microstructure)

**Sample #:** P19697-Bd

**Structure:**



**Composition:**

Mn x 10 <sup>3</sup>	PDI
104.5	1.09

1,4 addition	>92%
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**Synthesis Procedure:**

The 1,4-addition polybutadiene was prepared by anionic living polymerization of butadiene in non-polar media.

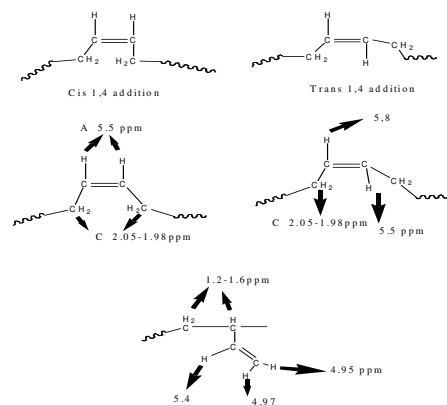
**Characterization:**

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

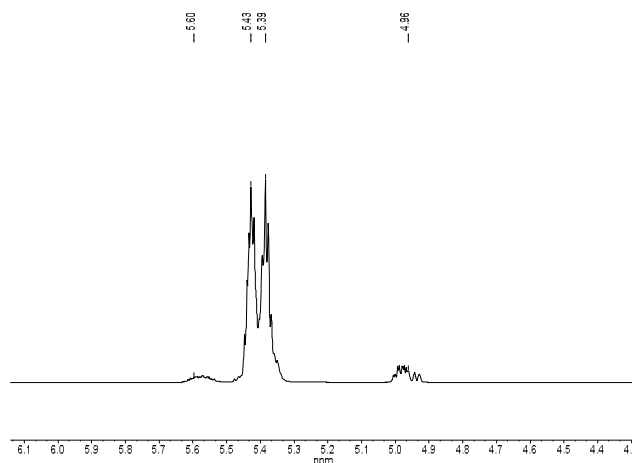
**Microstructure:** The ratio between 1,4- and 1,2-addition was calculated by <sup>1</sup>H NMR spectroscopy.

**Solubility:**

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



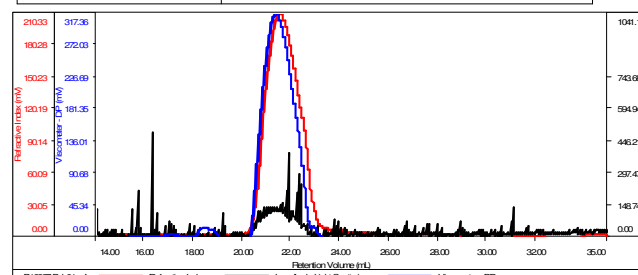
**<sup>1</sup>H NMR spectrum of the polymer:**



**SEC elugram of the polymer:**

**Sample ID-P19697-Bd**

Concentration (mg/mL)	2.9319
Sample dn/dc (mL/g)	0.1250
Method File	PS80K-Jan-2016-0000.vom
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)
P19697-Bd_01.vcl	104,555	110,681	98,046	1.059	5.0802