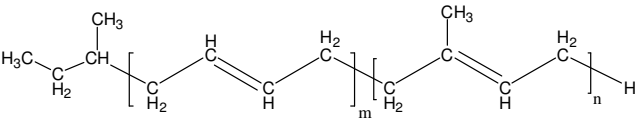


Sample Name: Polybutadiene-*b*-polyisoprene  
(predominantly 1,4-addition)

Sample # P19664-BdIp

Structure:



Composition:

$M_n \times 10^3$ (Bd-b-IP)	Mw/Mn
50.0-b-52.0	1.09

Synthesis Procedure:

The polymer was synthesized by anionic polymerization in cyclohexane as solvent.

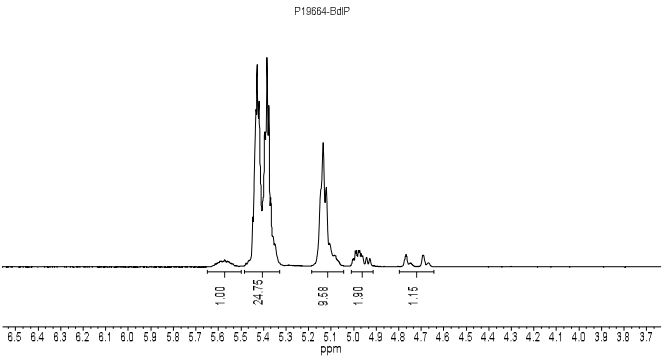
Characterization:

The polymer composition was analyzed by SEC and <sup>1</sup>H NMR analysis.

Thermal analysis:

Thermal analysis of the samples was carried out on a TA Q100 differential scanning calorimeter at a heating rate of 10°C/min. The midpoint of the slope change of the heat flow plot of the second heating scan was considered as the glass transition temperature (T<sub>g</sub>).

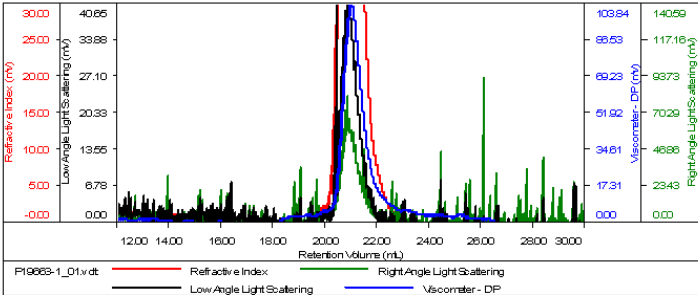
<sup>1</sup>H NMR of Bd-IP diblock copolymer in CDCl<sub>3</sub>:



SEC elugram:

Sample ID-P19664-1

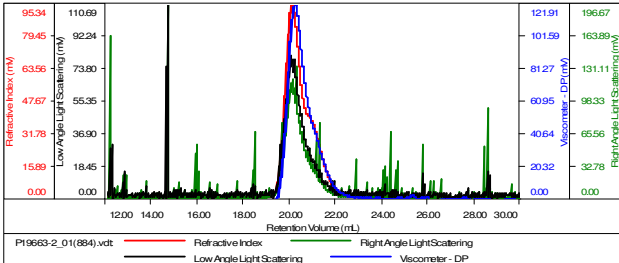
Concentration (mg/mL)	0.7624
Sample dn/dc (mL/g)	0.1250
Method File	F580K-June30-2015-0000.vcm
Column Set	3x PL 1113-6300
Solvent	THF



Sample	MW Number Average (Da)	MW Weight Average (Da)	MW at Peak (Da)	Polydispersity	Intrinsic Viscosity (dL/g)
P19664-1_01.vdt	51,309	51,273	48,134	1.019	3.6990

Sample ID-P19664-BdIp

Concentration (mg/mL)	0.7476
Sample dn/dc (mL/g)	0.1360
Method File	F580K-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)
P19663-2_01(884).vdt	102,779	112,040	122,265	1.090	4.9460