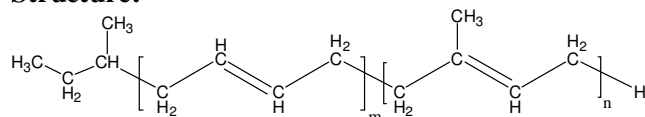


Sample Name: Polybutadiene-*b*-polyisoprene
(predominantly 1,4-addition)

Sample # P19576-Bdlp

Structure:



Composition:

$M_n \times 10^3$ (Bd-b-IP)	Mw/Mn
32.0-b-96.0 (by NMR)	1.04

Synthesis Procedure:

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

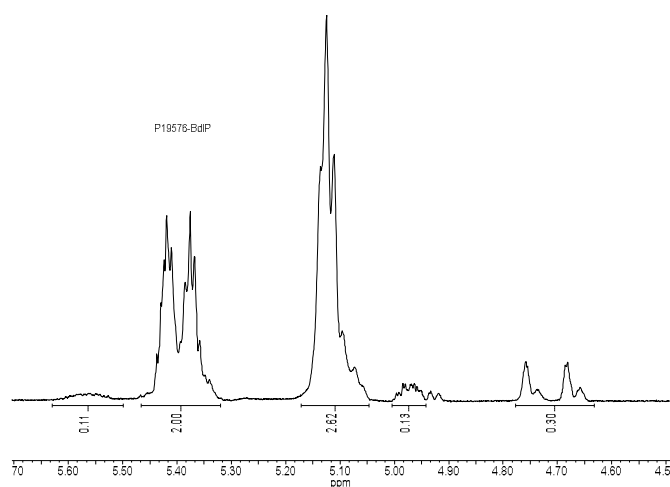
Characterization:

The polymer composition was analyzed by SEC and ^1H NMR analysis.

Thermal analysis:

Thermal analysis of the samples was carried out on a TA Q100 differential scanning calorimeter at a heating rate of $10^\circ\text{C}/\text{min}$. The midpoint of the slope change of the heat flow plot of the second heating scan was considered as the glass transition temperature (T_g).

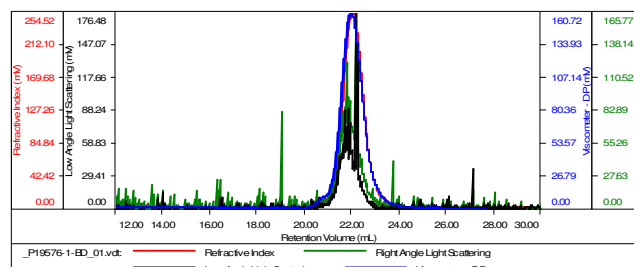
^1H NMR of Bd-IP diblock copolymer in CDCl_3 :



SEC of polybutadiene (first block):

Sample ID-P19576-Bd first Block

Concentration (mg/mL)	0.8100
Sample dn/dc (mL/g)	0.1250
Method File	P580K-Nov-2015-0000.vcm
Column Set	3x PL 1113-6300
Solvent	THF

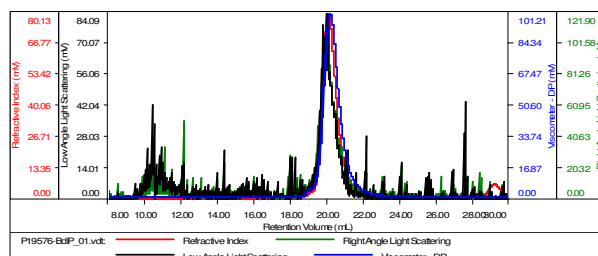


Sample	MW Number Average (Da)	MW Weight Average (Da)	MW at Peak (Da)	Polydispersity	Intrinsic Viscosity (dL/g)
_P19576-1-BD_01.vcl	29,754	32,553	36,848	1.094	6.1575

SEC of Bd-IP diblock copolymer:

Sample ID-P19576-BdlP

Concentration (mg/mL)	0.5444
Sample dn/dc (mL/g)	0.1350
Method File	P580K-June90-2015-0000.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)
P19576-BdlP_01.vcl	128,171	132,806	119,098	1.036	5.7810