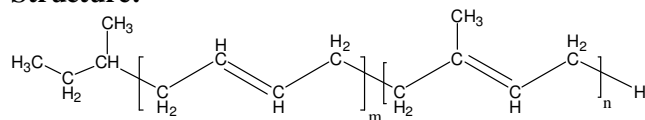


Sample Name: Polybutadiene-*b*-polyisoprene
(predominantly 1,4-addition)

Sample # P19649-BdIp

Structure:



Composition:

$\text{Mn} \times 10^3$ (Bd-b-IP)	Mw/Mn
45.0-b-124.0	1.02

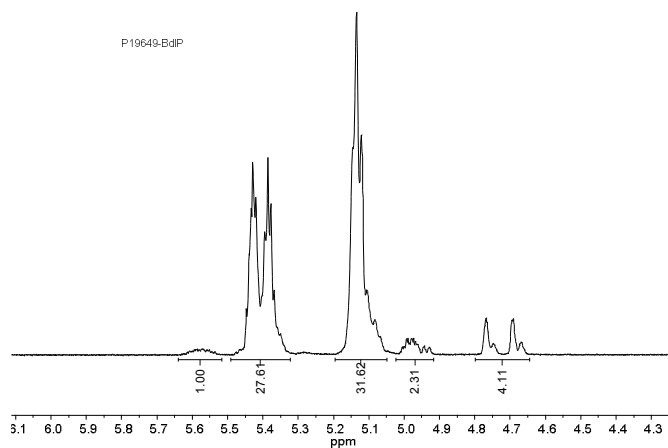
Synthesis Procedure:

The polymer was synthesized by anionic polymerization in cyclohexane. Isoprene monomer was added first, followed by addition of butadiene monomer.

Characterization:

The polymer structure was confirmed by ^1H NMR spectroscopy. Molecular weight and polydispersity index (Mw/Mn) were determined by size exclusion chromatography (SEC).

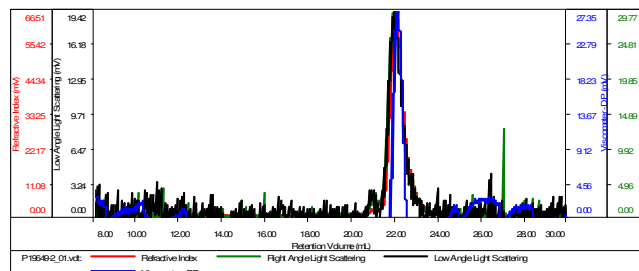
^1H NMR of Bd-IP diblock copolymer in CDCl_3 :



SEC of polybutadiene (first block):

Sample ID-P19649-Bd

Concentration (mg/mL)	0.4050
Sample dn/dc (mL/g)	0.1250
Method File	PS80K-June30-2015-0000.vom
Column Set	3x PL 1113-6300
Solvent	THF

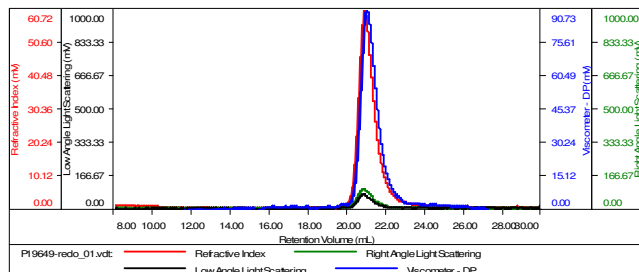


Sample	MW Number Average (Da)	MW Weight Average (Da)	MW at Peak (Da)	Polydispersity	Intrinsic Viscosity (dL/g)
P19649-2_01.vcl	46,113	46,666	45,137	1.012	0.8887

SEC of Bd-IP diblock copolymer:

Sample ID-P19649-BdIP

Concentration (mg/mL)	0.4057
Sample dn/dc (mL/g)	0.1390
Method File	PS80K-June30-2015-0000.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)
P19649-redo_01.vcl	169,245	171,544	165,131	1.014	7.0570