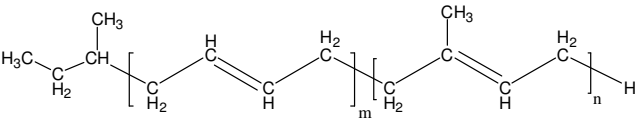


Sample Name: Polybutadiene-*b*-polyisoprene
(predominantly 1,4-addition)

Sample # P19479-BdIp

Structure:



Composition:

Mn × 10 ³ (Bd-b-IP)	Mw/Mn
27.0-b-260.0 (by NMR)	1.10

Synthesis Procedure:

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

Characterization:

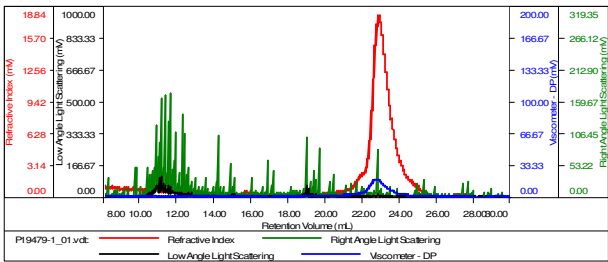
The polymer composition was analyzed by SEC and ¹H NMR analysis.

Thermal analysis:

Thermal analysis of the samples was carried out on a TA Q100 differential scanning calorimeter at a heating rate of 10°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_g).

SEC of polybutadiene fist block:
Sample ID: P19479-Bd

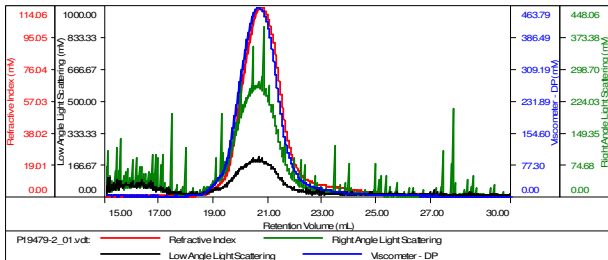
Concentration (mg/mL)	0.1602
Sample dn/dc (mL/g)	0.1250
Method File	PS80K-June30-2015-0000.vcm
Column Set	3x PL 1113-6300
Solvent	THF



Sample	MW Number Average (Da)	MW Weight Average (Da)	MW at Peak (Da)	Polydispersity	Intrinsic Viscosity (dL/g)
P19479-1_01.vcl	26,516	42,013	34,834	1.584	3.0079

SEC of diblock copolymer:
Sample ID: P19479-BdIP

Concentration (mg/mL)	1.4645
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)
P19479-2_01.vcl	237,954	317,669	272,382	1.104	10.4699

¹H NMR of Bd-IP diblock copolymer in CDCl₃:

