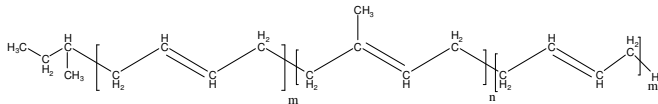


Sample Name:
Poly(butadiene-*b*-Isoprene-*b*-butadiene)
(predominantly 1,4-addition)

Sample #: P19493-BdIpBd

Structure:



Composition:

$M_n \times 10^3$ (Bd-b- <i>Ip</i> -b-Bd)	M_w/M_n
23.0-b-129.0-b-18.0 (by NMR)	1.03

Synthesis procedure:

The polymer was synthesized by anionic polymerization using cyclohexane as a solvent.

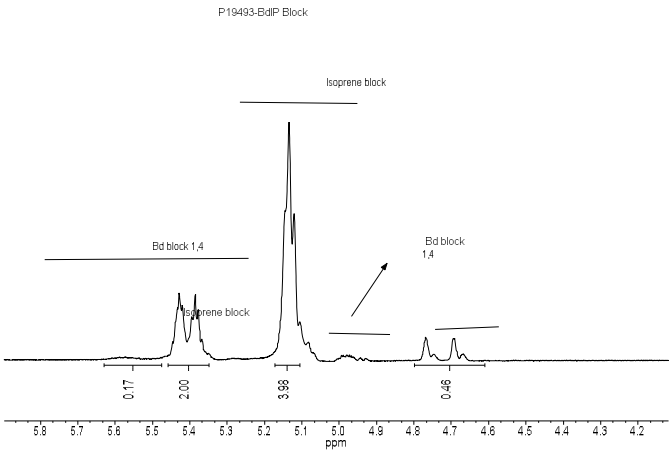
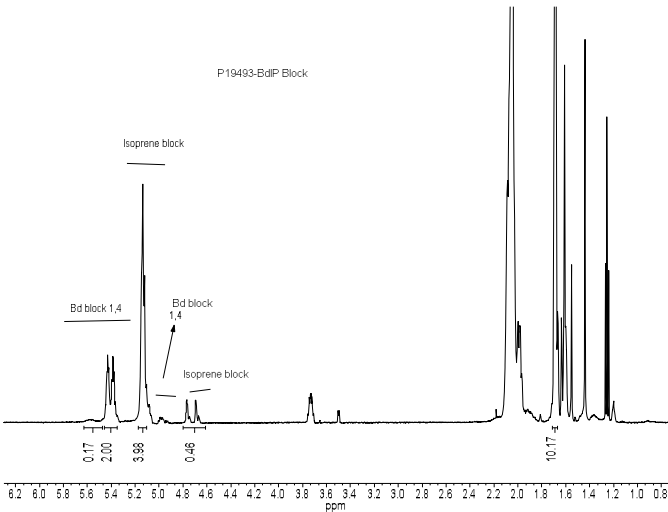
Characterization:

The polymer was analyzed by ¹H NMR, SEC, DSC.

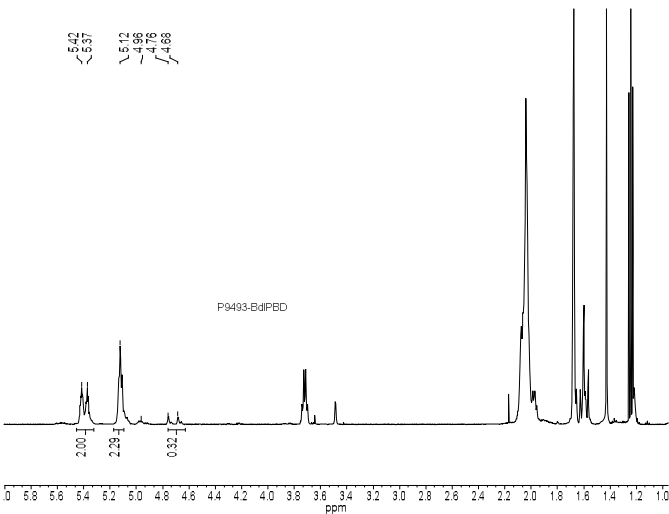
DSC thermal analysis:

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).

¹H NMR of Bd-*Ip* diblock copolymer in CDCl₃:

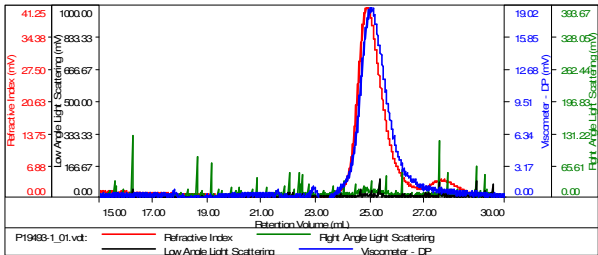


¹H NMR of Bd-*Ip*-Bd triblock copolymer in CDCl₃:



SEC of the first polybutadiene block:
Sample ID:P19493-Bd-First Block

Concentration (mg/mL)	0.3370
Sample diln: (mL/g)	0.1250
Method File	PS80K-June30-2015-0000.vcm
Column Set	3xPL 1113-6300
Solvent	THF

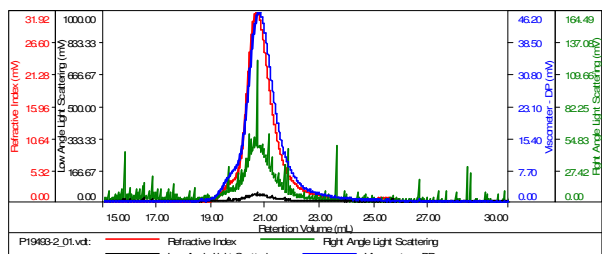


Sample	MW Number Average (Da)	MW Weight Average (Da)	MW at Peak (Da)	Polydispersity	Intrinsic Viscosity (dL/g)
P19493-1_01.vcl	23,351	29,477	22,596	1.262	2.1274

SEC of Bd-Ip diblock copolymer:

Sample ID:P19493-Bd-IP diblock

Concentration (mg/mL)	0.2252
Sample dn/dc (mL/g)	0.1560
Method File	PS80K-June30-2015-0000.vcm
Column Set	3x PL 1113-6300
Solvent	THF

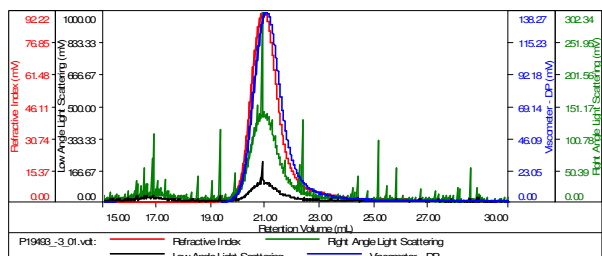


Sample	MW Number Average (Da)	MW Weight Average (Da)	MW at Peak (Da)	Polydispersity	Intrinsic Viscosity (dL/g)
P19493-2_01.vcl	152,169	163,509	133,698	1.075	7.5890

SEC of Bd-Ip-Bd triblock copolymer:

Sample ID:P19493-Bd-IP-Bd triblock

Concentration (mg/mL)	0.8234
Sample dn/dc (mL/g)	0.1300
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)
P19493_3_01.vcl	170,137	175,469	164,231	1.031	6.3036