

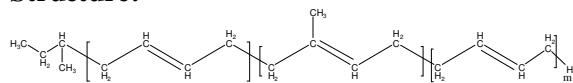
Sample Name:

Poly(butadiene-*b*-Isoprene-*b*-butadiene)

Rich in 1,4 microstructure

Sample #: P19567- BdIpBd

Structure:



Composition:

$M_n \times 10^3$ (Bd- <i>b</i> -Ip- <i>b</i> -Bd)	PDI
41.0- <i>b</i> -203.0- <i>b</i> -50.0 (by NMR)	1.17

Synthesis Procedure:

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

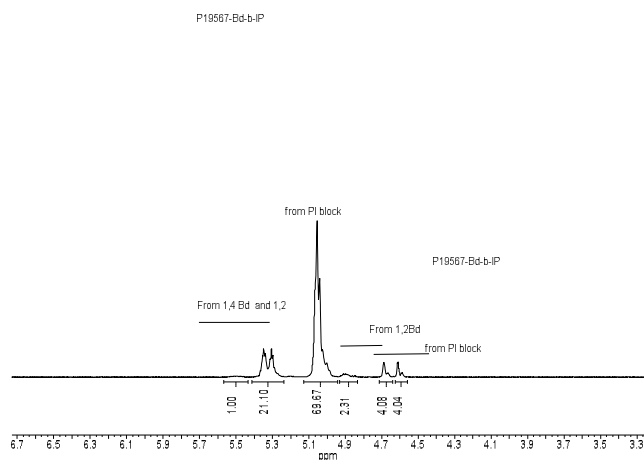
Characterization:

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

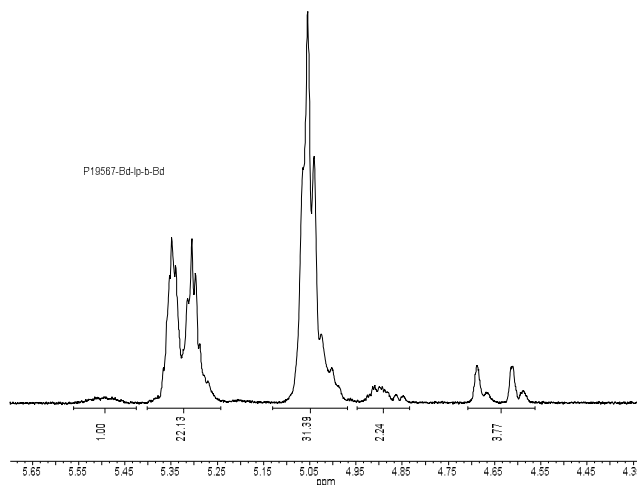
DSC thermal analysis:

Thermal analysis of the samples was carried out on a TA Q100 differential scanning calorimeter at a heating rate of $10^\circ\text{C}/\text{min}$. 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 :



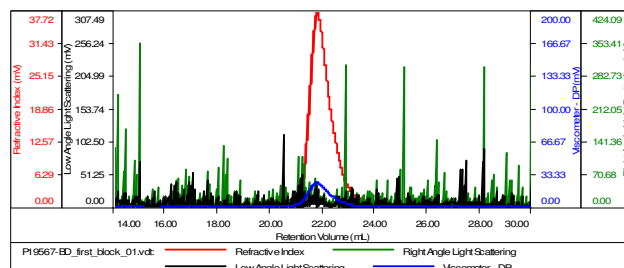
^1H NMR of Bd-IP-Bd triblock copolymer in CDCl_3 :



SEC of the first polybutadiene block:

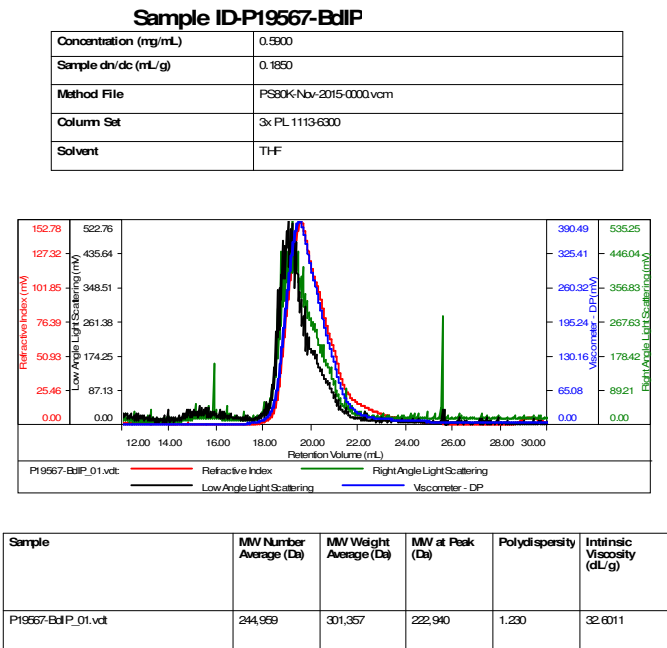
Sample ID-P19567-Bd

Concentration (mg/mL)	0.1036
Sample dn/dc (mL/g)	0.1270
Method File	PS80K-Nov-2015-0000.vcm
Column Set	3x PL 1113 6000
Solvent	TH-F



Sample	MW Number Average (Da)	MW Weight Average (Da)	MW at Peak (Da)	Polydispersity	Intrinsic Viscosity (dL/g)
P19567-BD_first_block_01.vcl	40,635	63,478	44,201	1.562	6.5937

SEC of Bd-Ip diblock copolymer:



SEC of Bd-Ip-Bd triblock copolymer:

