

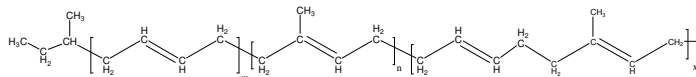
Sample Name:

**Poly(butadiene-b-isoprene-b-butadiene-co-Isoprene
ran)**

Rich in 1,4 microstructure

Sample #: **P19723- BdIpBdIPran**

Structure:



Composition:

Mn × 10 ³ (Bd-b-IP-b-Bd-Ipran)	PDI
27.0-b-110.0-b-22.0 Compositions from HNMR	1.18

Synthesis Procedure:

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

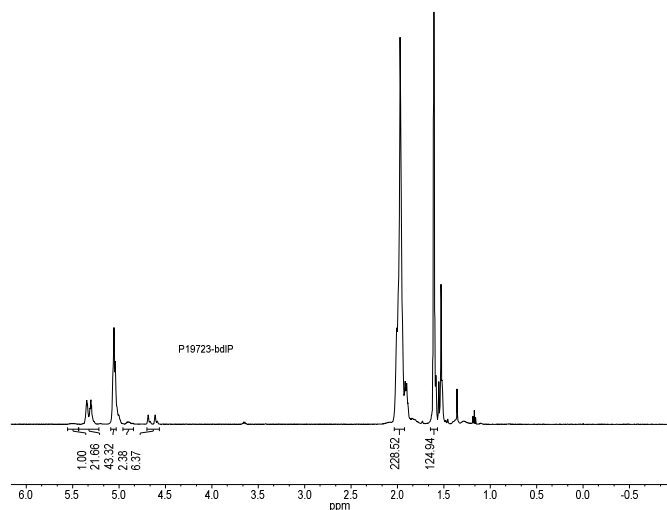
Characterization:

The polymer was characterized by SEC and ¹H NMR.

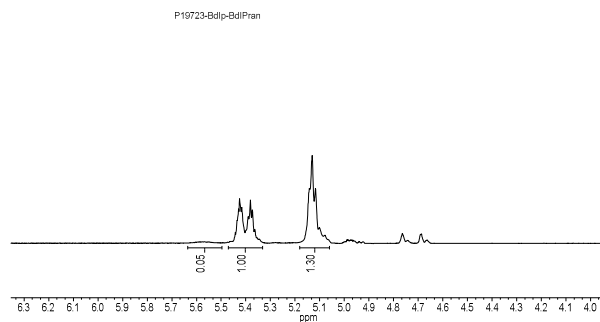
Thermal analysis:

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 spectrum of Bd-IP diblock :

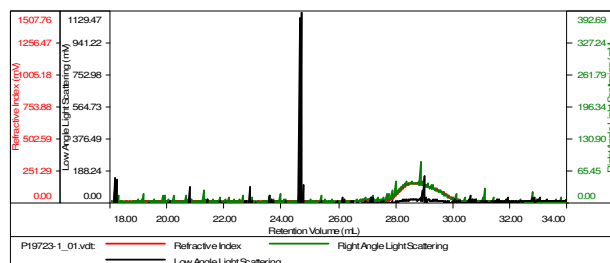


¹H NMR spectrum of polymer :



SEC elugram of the polymer: First block
Sample ID-P19723-1

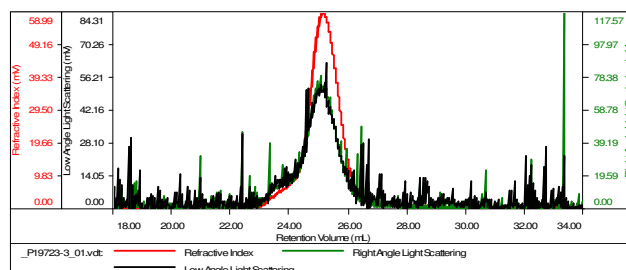
Concentration (mg/mL)	1.1151
Sample dn/dc (mL/g)	0.1250
Method File	PS80K-Marc2016-0001.vcm
Column Set	3x PL 1113-6300
Solvent	THF



Sample	Mh (Da)	Mw (Da)	Mw/Mh	IV (dL/g)	Rh (nm)	Ret Vol (mL)
P19723-1_01.vdt	27,174	27,548	1.014	3.9684	15.60	26.597

Sample ID-P19723-3

Concentration (mg/mL)	0.3606
Sample dn/dc (mL/g)	0.1250
Method File	PS80K-Marc2016-0001.vcm
Column Set	3x PL 1113-6300
Solvent	THF



Sample	Mh (Da)	Mw (Da)	Mw/Mh	IV (dL/g)	Rh (nm)	Ret Vol (mL)
P19723-3_01.vdt	157,805	187,098	1.186	12.5225	41.76	25.093