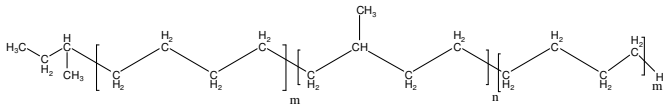
Sample Name:
Poly(Ethylene–*b*–Ethylene Propylene–*b*–Ethylene) triblock copolymer

Other name:
Hydrogenated form of Poly(Butadiene–*b*–Isoprene–*b*–Butadiene), predominantly in 1,4-addition

Sample # **P19643A-EEPrE**

Structure:



Composition:

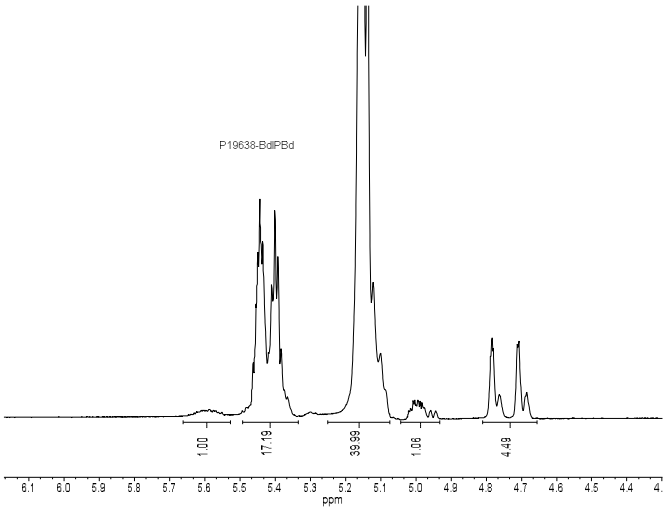
Mn × 10^3 **(Bd-b-Ip-b-Bd)**	PDI
8.5-b-127.0-b-7.0 (by NMR)	1.09
After Hydrogenation 9.0-b-130.0-b-8.0	1.09

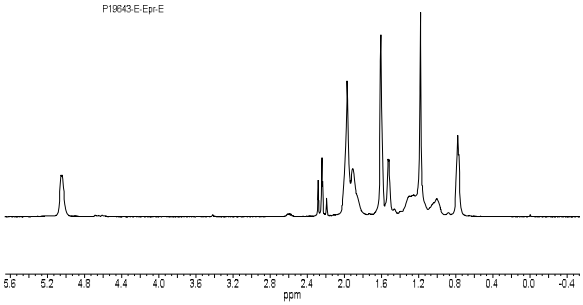
Degree of Hydrogenation	> 98%

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

Characterization:
The polymer was analyzed by ^{1}H NMR, SEC, DSC.

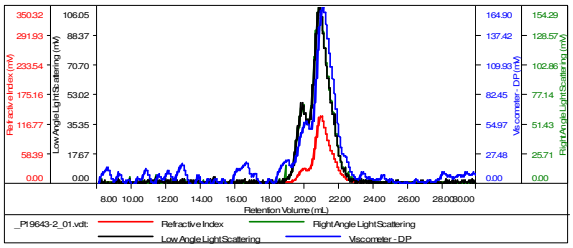
^{1}H NMR of Bd-Ip-Bd triblock copolymer in $CDCl_3$:





SEC of Bd-Ip diblock copolymer:
Sample ID-P19643-2 Bd IP

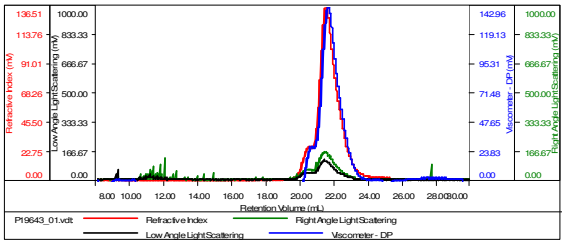
Concentration (mg/mL)	1.0776
Sample dn/dc (mL/g)	0.1250
Method File	PS80K-June30-2015-0000.vcm
Column Set	3x PL 1113-6300
Solvent	THF



Sample	MW Number Average (Da)	MW Weight Average (Da)	MW at Peak (Da)	Polydispersity	Intrinsic Viscosity (dL/g)
_P19643-2_01.vdt	137,173	139,587	128,841	1.018	5.8197

SEC of Bd-Ip-Bd triblock copolymer:
Sample ID-P19643-BdIpBd

Concentration (mg/mL)	1.3324
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)
P19643_01.vdt	143,669	153,123	130,273	1.066	3.9849