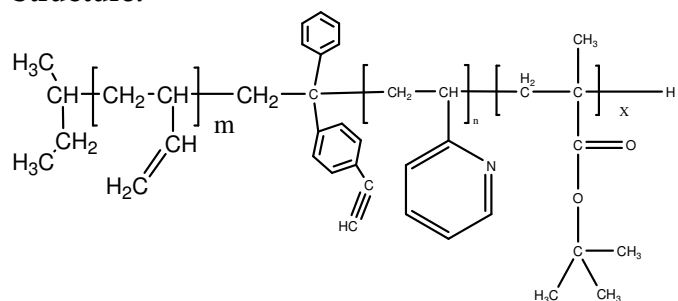


Sample Name: Poly(Butadiene-b-2-vinyl pyridine-tertbutyl methacrylate) bearing ethynyl (acetylenic triple bond) phenyl – phenyl ethylene at the junction of Bd-2VP block

Sample #: P18699A-Bd(acetylene)
2VPtBuMA

Structure:

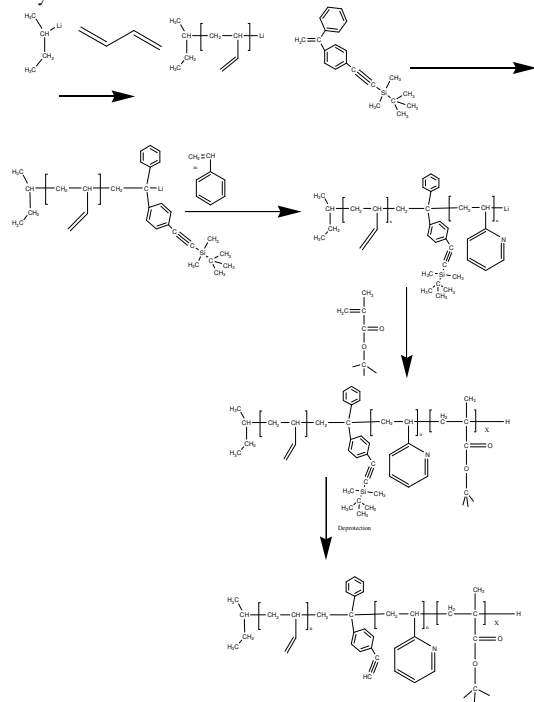


Composition:

Mn x 10 ³ Bd-b-2VP-b-tBuMA	PDI
27.0-b-200.0-b-920.0	1.23
The final Block contain traces amount of diblock copolymer Difficult to remove	<10%

Synthesis Procedure:

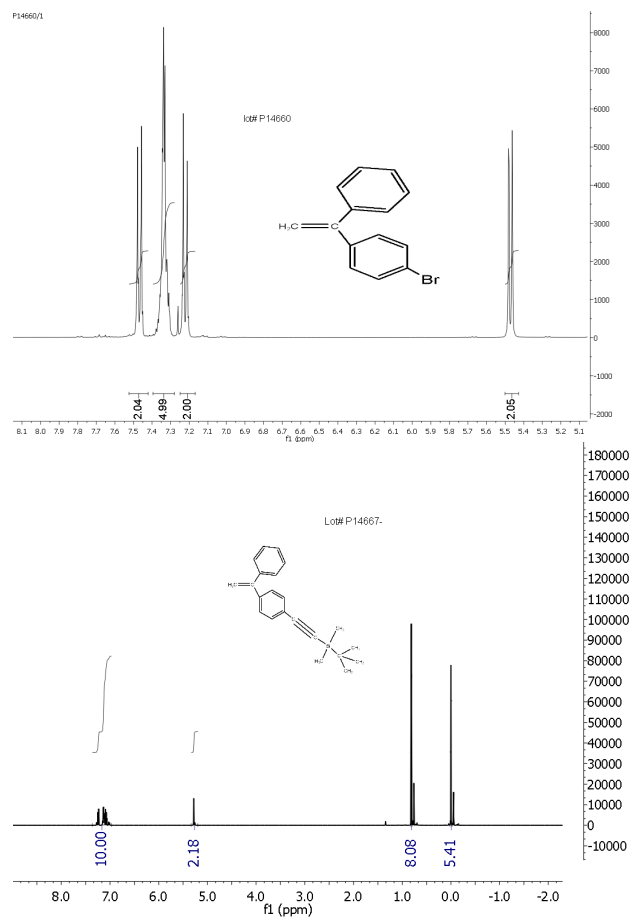
By anionic Process



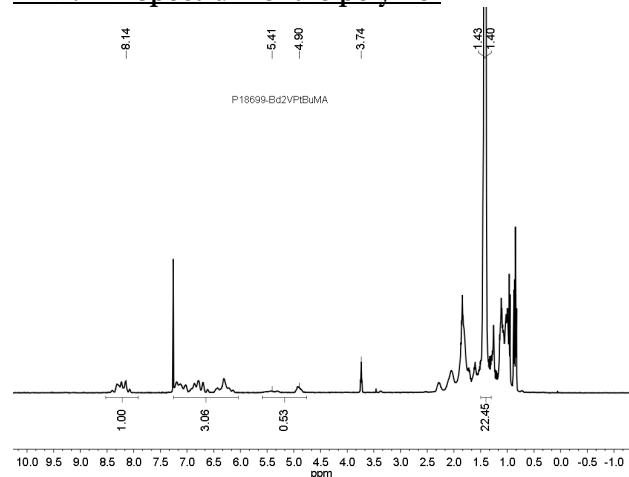
Characterization:

By SEC and HNMR spectroscopy.

DPE-4Br: The product was characterized by NMR and FTIR.



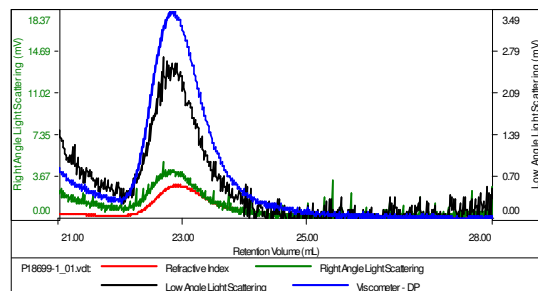
1H-NMR Spectrum of the polymer



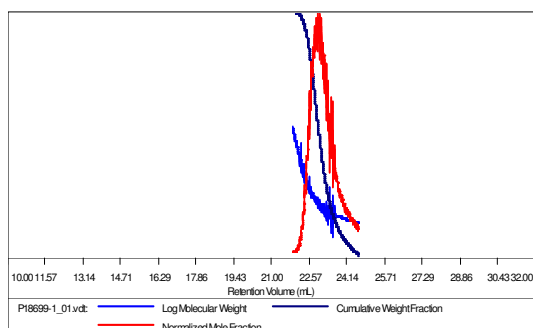
SEC of the polymer:

Sample ID: P18699-Bd

Concentration (mg/mL)	1.1616
Sample dn/dc (mL/g)	0.1270
Method File	PS80K-Apr15-2014-0000.vcm
Column Set	3x PL 1113-6300
Solvent	THF

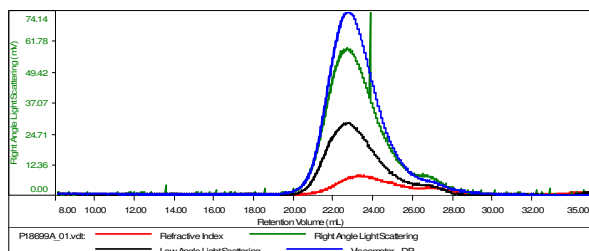


Sample	Mn	Mw	Mp	Mw/Mn	IV
P18699-1_01.vdt	27,042	29,610	28,500	1.095	0.2182



Sample ID: P18699A-Bd2VptBuMA

Concentration (mg/mL)	0.8973
Sample dn/dc (mL/g)	0.1100
Method File	PS80K-March6-2015-0000.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)
P18699A_01.vdt	1.116 e 6	1.375 e 6	1.222 e 6	1.232	3.8400