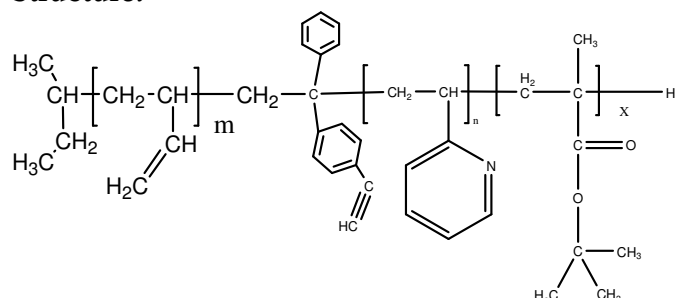


**Sample Name:** Poly(Butadiene-b-2-vinyl pyridine-tertbutyl methacrylate) bearing ethynyl (acetylenic triple bond) phenyl – phenyl ethylene at the junction of Bd-2VP block

**Sample #:** P18699-Bd(acetylene) 2VPtBuMA  
**Structure:**

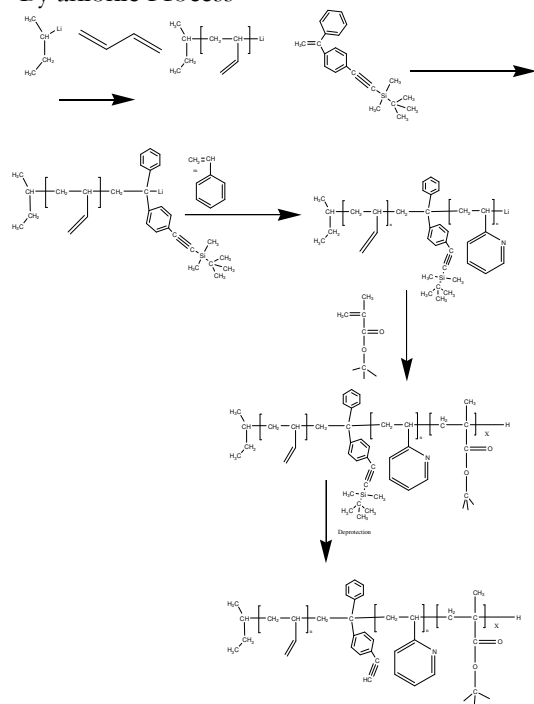


**Composition:**

Mn x 10 <sup>3</sup> Bd-b-2VP-b-tBuMA	PDI
27.0-b-198.0-b-666.0	1.38
The final Block contain traces amount of diblock copolymer Difficult to remove	<10%

**Synthesis Procedure:**

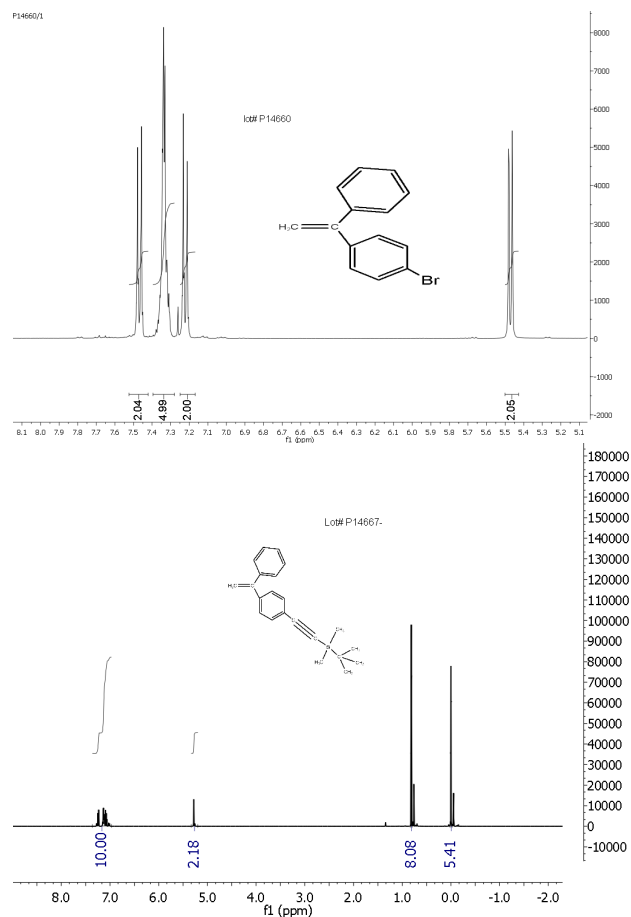
By anionic Process



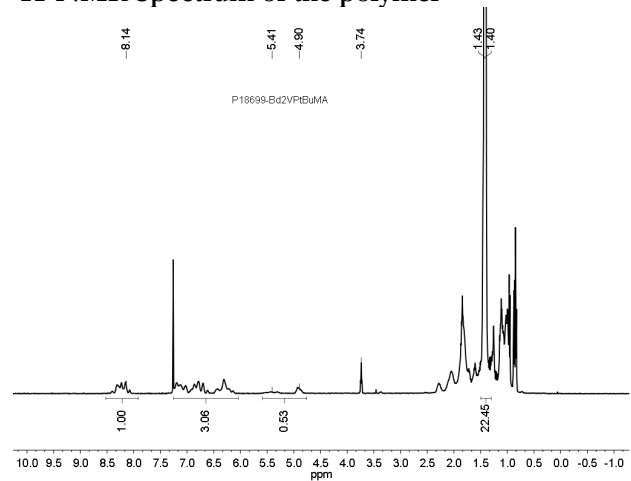
**Characterization:**

By SEC and HNMR spectroscopy.

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



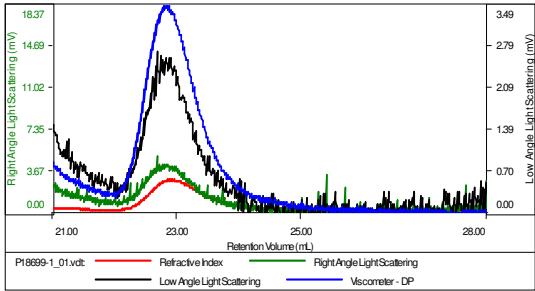
**<sup>1</sup>H-NMR Spectrum of the polymer**



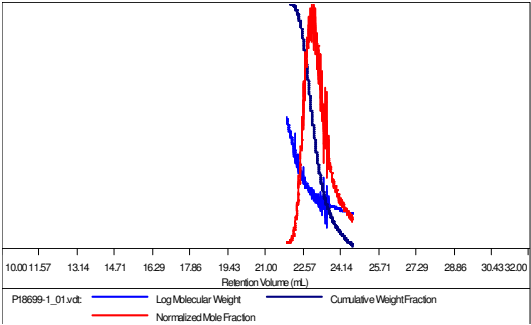
SEC of the Sample:

Sample ID: P18699-Bd

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

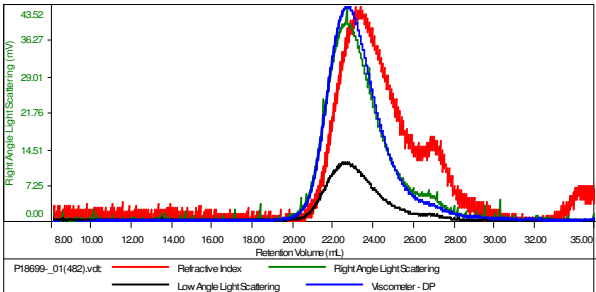


Sample	Mn	Mw	Mp	Mw/Mn	IV
P18699-1_01.vdt	27,042	29,610	28,500	1.095	0.2182



Sample ID:P18699-Bd2VptBuMA

Concentration (mg/mL)	0.7346
Sample ch/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)
P18699-01(482).vdt	890,823	1.221 e 6	1.263 e 6	1.370	3.3100