

[illegible]

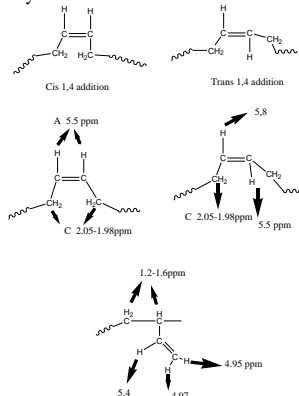
<b>Composition:</b>	
Mn x 10 <sup>3</sup>	1.1
PDI	1.03
1,2-microstructure	45%
1,4-microstructure	55%

**Synthesis Procedure:** By anionic process

Carboxy-terminated polybutadiene was prepared by anionic living polymerization of butadiene in non-polar solvent followed by termination with ethylene oxide.

### Characterization:

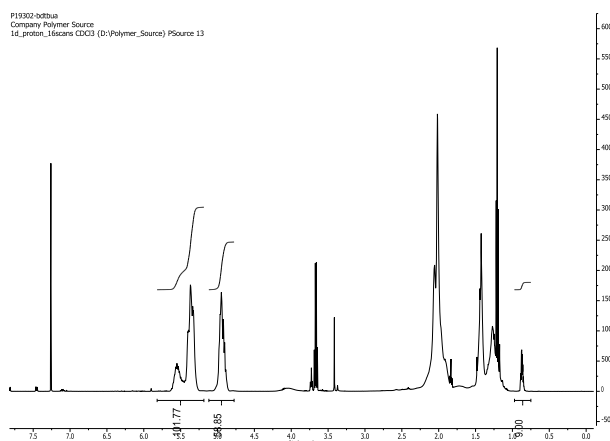
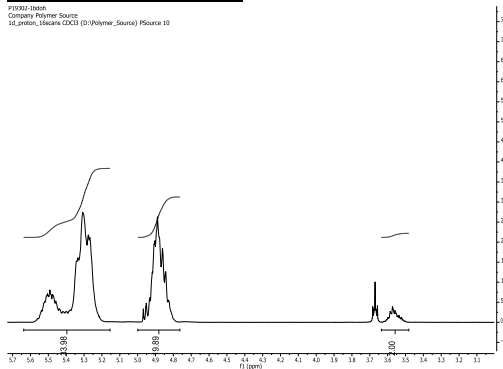
By HNMR and GPC.



**Solubility:**

Polymer is soluble in DMF, THF, toluene, hexane, cyclohexane and  $\text{CHCl}_3$ .

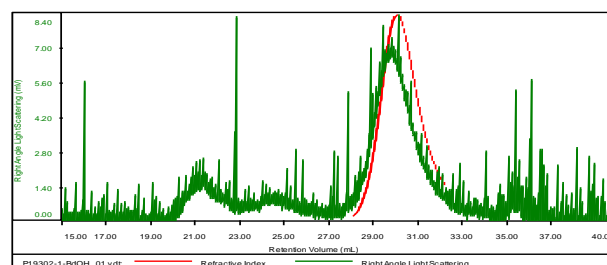
**<sup>1</sup>HNMR of BdOH:**



**SEC of BdOH:**

Sample ID:P19302-1-BdOH

Concentration (mg/mL)	25.9671
Sample dn/dc (mL/g)	0.1270
Method File	PS80K-May20-2015-0000.vcm
Column Set	3x PL 1113-6300
Solvent	THF



Sample	MW Number Average (Da)	MW Weight Average (Da)	MW at Peak (Da)	Polydispersi	Intrinsic Viscosity (dL/g)
P19302-1-BdOH_01.vdt	1,065	1,091	1,102	1.024	0.1065

**FTIR of before and after hydrolysis of BdtBuA to BdCOOH:**

