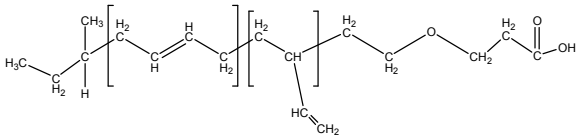
Sample Name: **COOH Terminated Polybutadiene, 1, 2 addition microstructure**

Sample #: **P19289A-BdCOOH**

Structure:



Composition:

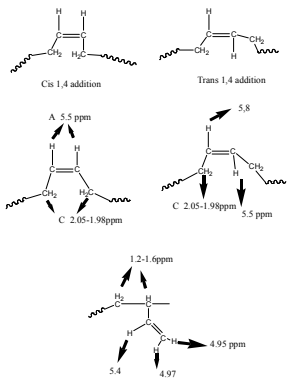
Mn x 10^3	2.0
PDI	1.02
1,2-microstructure	70%
1,4-microstructure	30%

Synthesis Procedure: By anionic process

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

Characterization:

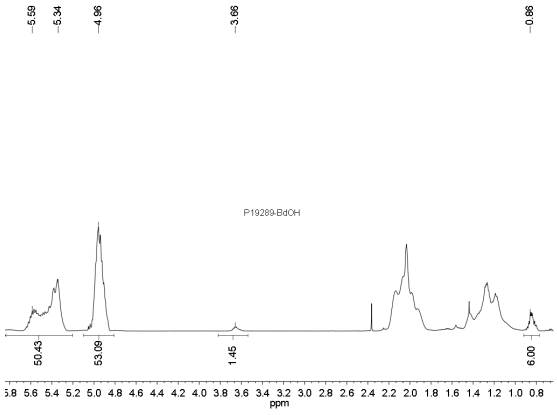
By HNMR and GPC.

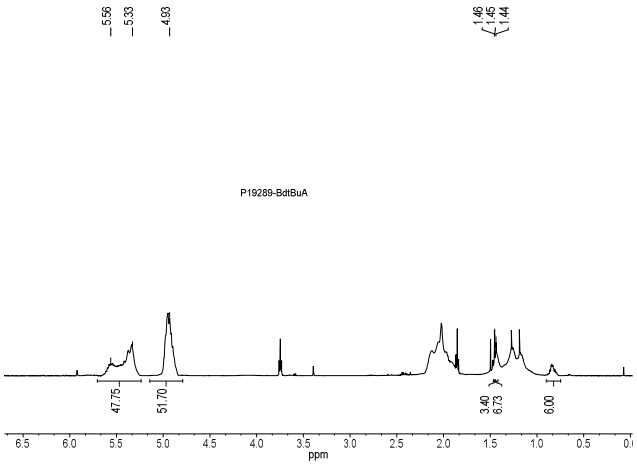


Solubility:

Polymer is soluble in DMF, THF, toluene, hexane, cyclohexane and $CHCl_3$.

^{1}HNMR of BdOH:

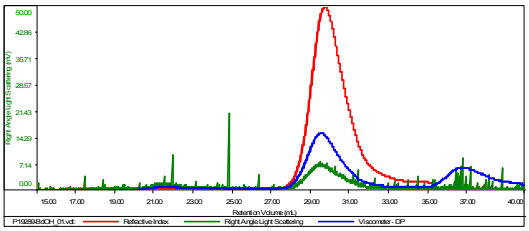




SEC of BdOH:

Sample ID:P19289-BdOH

Concentration (mg/mL)	14.1823
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)	Polydispersit	Intrinsic Viscosity (dL/g)
P19289-BdOH_01.vdt	1,886	1,976	1,953	1.048	0.1402

FTIR of before and after hydrolysis of BdtBuA to BdCOOH: