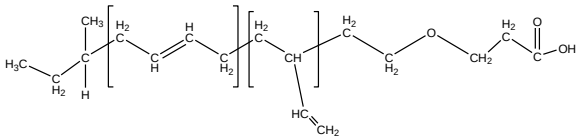
Sample Name: **COOH Terminated Polybutadiene, 1,2/1,4-microstructure**

Sample #: **P19305A-BdCOOH**

Structure:



Composition:

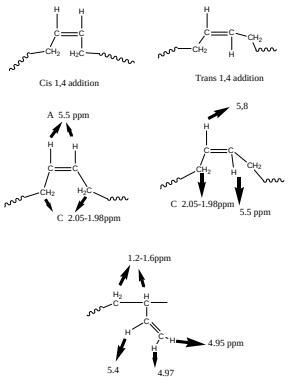
Mn x 10^3	2.5
PDI	1.03
1,2-microstructure	40%
1,4-microstructure	60%

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:

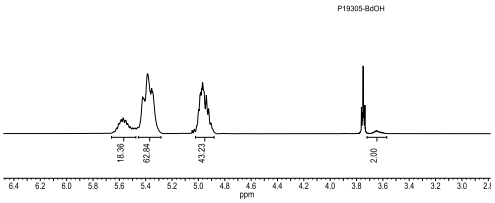
By HNMR and GPC.

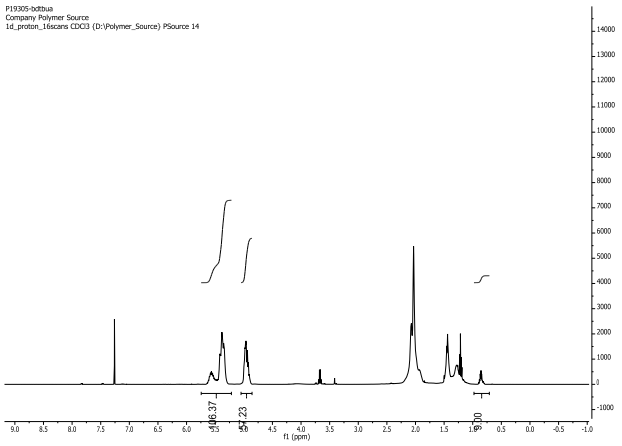


Solubility:

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

<u>^{1}HNMR of BdOH:</u>

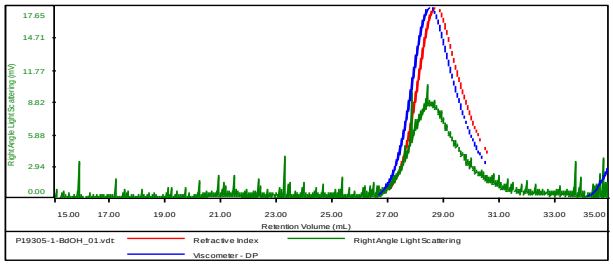




<u>SEC of BdOH:</u>

Sample ID:P19305-1-BdOH

Concentration (mg/mL)	17.2357
Sample dn/dc (mL/g)	0.1200
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)
P19305-1-BdOH_01.vdt	2,391	2,480	2,412	1.037	0.1437

<u>FTIR of before and after hydrolysis of BdtBuA to BdCOOH:</u>