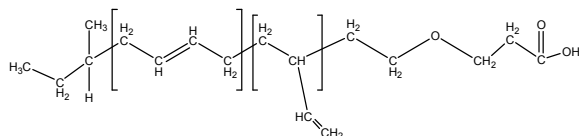


Sample Name: COOH Terminated Polybutadiene,
1,2/1,4-microstructure

Sample #: P19303-BdCOOH

Structure:



Composition:

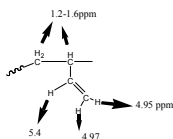
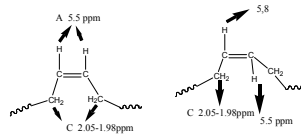
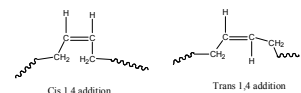
Mn x 10 ³	2.2
PDI	1.03
1,2-microstructure	50%
1,4-microstructure	50%
End group functionality	>98%

Synthesis Procedure: By anionic process

Carboxy-terminated polybutadiene was prepared by anionic living polymerization of butadiene in polar/non polar solvents followed by termination with ethylene oxide and conversion to tertbutyl propionatwe and finally hydrolysis of tert.butyl ester to carboxy functional group.

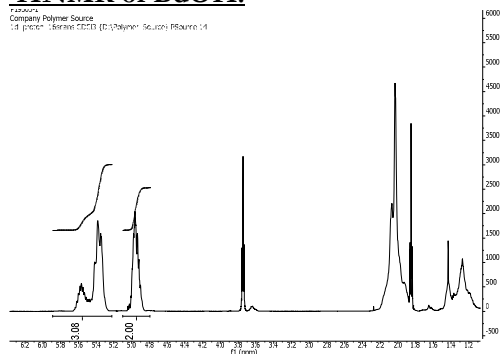
Characterization:

By titration, HNMR and GPC.



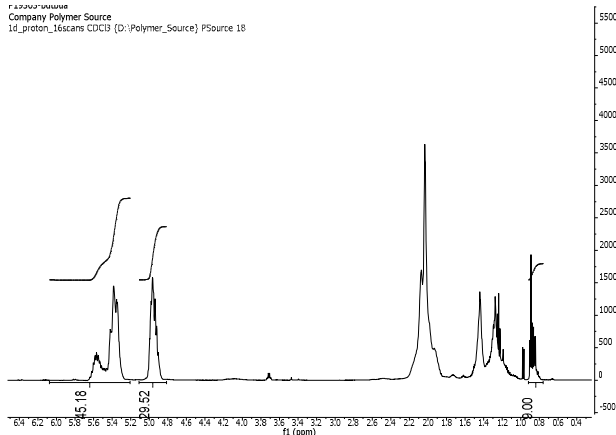
1HNMR of BdOH:

Company Polymer Source
1d_p19303-1-BdOH-01.volt (D:\Polymer_Source\PSource 18



1HNMR of BdtBu propionnte:

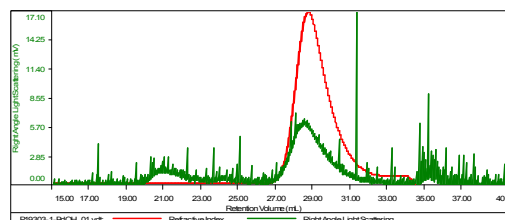
Company Polymer Source
1d_p19303-1-BdOH-01.volt (D:\Polymer_Source\PSource 18



SEC of BdOH:

Sample ID:P19303-1-BdOH

Concentration (mg/mL)	11.5120
Sample divd: (mL/g)	0.1270
Method File	PS80K-May20-2015-0000.vcm
Column Set	3xPL 1113-6300
Solvent	THF



Sample	MW Number Average (Da)	MW Weight Average (Da)	MW at Peak (Da)	Polydispersity	Intrinsic Viscosity (dL/g)
P19303-1-BdOH-01.volt	2,279	2,341	2,294	1.027	0.1512

FTIR of before and after hydrolysis of BdtBuAc to BdCOOH:

