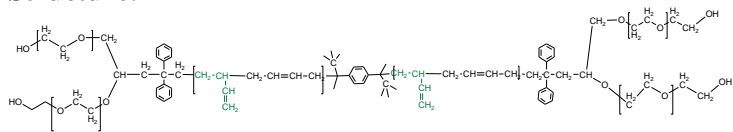


Sample Name: H-Type architecture of Polybutadiene and Poly(ethylene oxide)

Sample # P3101-HBdEO

Structure:

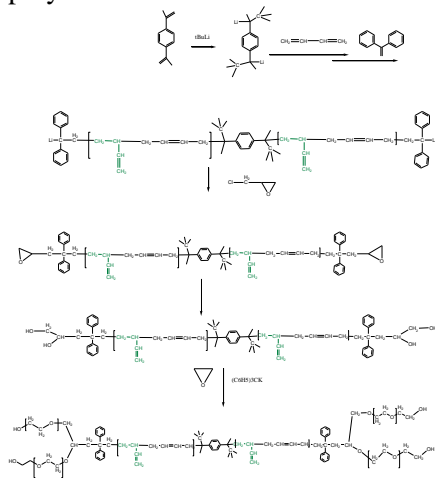


Composition:

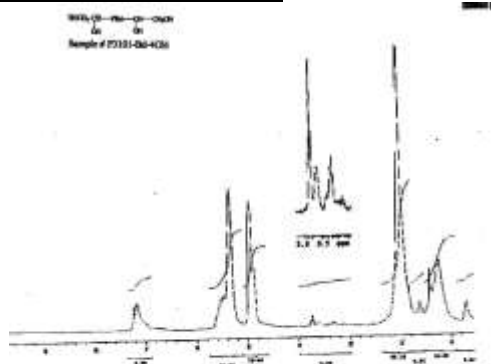
$M_n \times 10^3$ of one PBd center arm (g/mol)	Total $M_n \times 10^3$ (g/mol)	PDI
8.0	64.0	1.15
Mn of PEO branch: 14.0		

Synthesis:

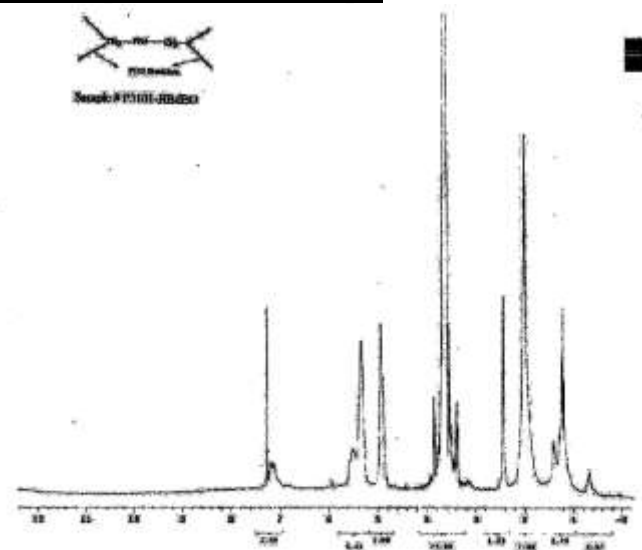
The polymer was synthesized by anionic process polymerization.



HNMR spectrum of Bd-4OH

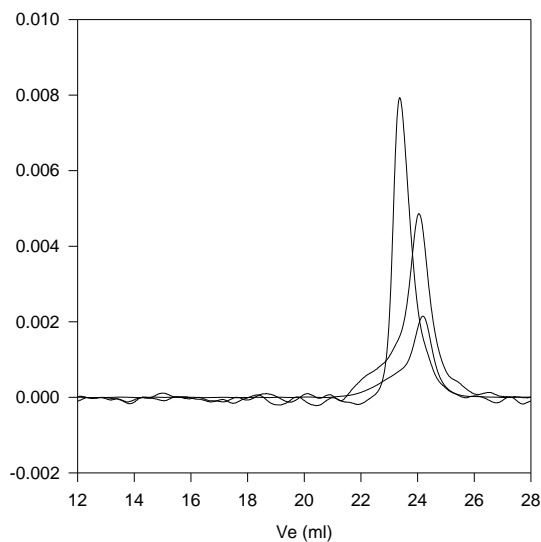


HNMR spectrum of the sample



SEC elugram of the polymer

P3101-H BdEO



Size Exclusion Chromatography:

— PBd-Center Bar, $M_n=8,000$, $M_w=10,500$, $M_w/M_n=1.3$

— α,ω Epoxy terminated PBd Center bar: $M_w/M_n=1.30$

— Final multi- α,ω Final H type architecture: Data from light scattering:
Mw total= 64,000, $M_w/M_n=1.15$ (radius of Hydration:9.15nm viscosity: 0.456 dl/g)
PEO branch Mn from H NMR: 14,000