

Supporting Information

Table S1: Vibrational Modes from 1,4 poli(cis-isoprene)

NR (cm ⁻¹)	Relative Intensity	NR/SF ₆ (cm ⁻¹)	Relative Intensity	Assignment ^{1,2,3}
738	0.193	742	0.240	CH ₂ rocking
760	0.141	760	0.186	CH ₂ rocking
834	1.004	834	0.960	=CH bending out of plane or deformation of C=C-H
889	0.103	889	0.137	CH ₂ wagging
1012	0.223	1012	0.170	C-CH ₂ Stretching
1038	0.297	1038	0.239	CH ₃ rocking
1080	0.427	1080	0.334	C-O Stretching of ester
1091	0.401	1091	0.316	C-CH ₂ stretching or CH ₂ twisting
1126	0.329	1127	0.263	CH ₂ wagging
1589	0.227	1589	0.126	C-N stretching + deformation N-H of secondary Amide
1662	0.368	1662	0.322	Primary Amide, C=O Stretching
2850	1.102	2852	0.953	C-H Angular deformation on CH ₂
2918	1.319	2916	1.117	C-H Symmetric deformation on -CH ₃
2960	1.179	2960	1.080	C-H Asymmetric deformation on -CH ₃
3394	0.181	3394	0.104	N-H Symmetric stretching

¹Healey AM, Hendra PJ, West YD. Polymer 1996; 37(18): 4009-4024.

²Nallasamy P, Mohan S. The Arabian Journal for Science and Engineering 2004; 29(1^a).

³Rippel MM, Lee L-T, Leite CAP, Galembeck F. Journal of Colloid and Interface Science 2003; 268: 330-340.