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APPENDIX A

Table A1 Tensile strength of nylon 6/LDPE blends (without compatibilizer).

Blend composition (nylon 6:LDPE)	0.8:0.2	0.6:0.4	0.4:0.6	0.2:0.8
Tensile strength (MPa)	22.3152	19.0539	10.8809	9.0128

Table A2 Tensile strength of nylon 6/ LDPE blends (with compatibilizer).

Surlyn (%)	Nylon 6:LDPE 0.8:0.2	Nylon 6: LDPE 0.6:0.4	Nylon 6:LDPE 0.4:0.6	Nylon 6:LDPE 0.2:0.8
0.0	22.3152	19.0539	10.5059	9.0128
0.1	24.1762	15.5943	13.4223	9.3148
0.5	30.9013	20.6966	16.8343	10.0900
1.0	37.4830	22.3738	20.0096	10.6044
2.5	39.9093	23.3651	20.2414	10.2783
3.5	42.4245	24.5020	21.1041	16.0391
5.0	50.2236	27.1184	28.2518	17.3687
10.0	53.1261	31.1802	31.5508	20.7611
15.0	53.3407	33.1028	34.3257	24.2092
25.0	56.0036	35.7210	35.6895	26.2404
35.0	55.5188	37.8798	36.5173	27.5689

Table A3 Tensile modulus of nylon 6/LDPE blends (without compatibilizer).

Blend composition (nylon 6:LDPE)	0.8:0.2	0.6:0.4	0.4:0.6	0.2:0.8
Tensile modulus (MPa)	440.7501	422.7666	309.4116	232.6506

Table A4 Tensile modulus of nylon 6/ LDPE blends (with compatibilizer).

Surlyn (%)	Nylon 6:LDPE 0.8:0.2	Nylon 6:LDPE 0.6:0.4	Nylon 6:LDPE 0.4:0.6	Nylon 6:LDPE 0.2:0.8
0.0	440.7501	422.7666	309.4116	232.6506
0.1	462.3784	460.5826	478.9633	278.7642
0.5	489.3908	480.6399	495.5820	285.1813
1.0	513.8695	494.0600	577.4787	294.4807
2.5	527.5716	522.5641	617.6398	295.2549
3.5	536.2504	554.0303	627.9969	309.6579
5.0	570.5046	577.5322	666.6833	305.6296
10.0	580.5721	595.2834	659.8730	310.7202
15.0	618.0514	615.5441	664.6011	312.6351
25.0	648.2263	626.2108	661.7623	321.5476
35.0	668.7946	661.0136	664.4730	321.8743

Table A5 Impact strength of nylon 6/LDPE blends (without compatibilizer).

Blend composition (nylon 6:LDPE)	0.8:0.2	0.6:0.4	0.4:0.6	0.2:0.8
Impact strength (kJ/m^2)	5.11	6.35	9.40	13.73

Table A6 Impact strength of nylon 6/ LDPE blends (with compatibilizer).

Surlyn (%)	Nylon 6:LDPE 0.8:0.2	Nylon 6:LDPE 0.6:0.4	Nylon 6:LDPE 0.4:0.6
0.0	6.35	9.40	13.73
0.1	6.97	10.25	15.34
0.5	7.08	10.82	16.77
1.0	9.02	11.29	17.59
2.5	25.39	11.26	18.04
3.5	58.11	11.74	18.68
5.0	78.89	12.61	23.83
10.0	81.00	26.54	64.90
15.0	87.58	64.60	95.20
25.0	-	84.40	106.79
35.0	-	90.74	-

APPENDIX B

Table B1 Hardness of Nylon 6/LDPE Blends (without compatibilizer).

Blend composition (nylon 6:LDPE)	0.8:0.2	0.6:0.4	0.4:0.6	0.2:0.8
Hardness (Shore D)	56.4000	42.9545	42.9545	35.0500

Table B2 Hardness of Nylon 6/ LDPE Blends (with compatibilizer).

Surlyn (%)	Nylon 6:LDPE 0.8:0.2	Nylon 6: LDPE 0.6:0.4	Nylon 6:LDPE 0.4:0.6	Nylon 6:LDPE 0.2:0.8
0.0	56.4000	58.1154	42.9545	35.0500
0.1	57.0455	57.8214	46.9545	41.2000
0.5	57.7500	59.0714	48.7273	43.0000
1.0	57.7941	60.9667	52.3185	47.0385
2.5	59.6000	62.6000	52.5455	47.5500
3.5	60.9667	63.3929	53.2273	50.8500
5.0	62.8750	66.5333	53.9167	55.0500
10.0	63.7143	67.7500	57.6154	56.1500
15.0	64.5385	68.2500	63.2727	57.0909
25.0	64.5357	69.9722	65.4167	57.8636
35.0	66.8071	72.5833	67.6667	58.4091

APPENDIX C

Table C1 Particle Size of Dispersed Phase of Nylon 6/LDPE Blends (without compatibilizer).

Blend composition (nylon 6:LDPE)	0.8:0.2	0.6:0.4	0.2:0.8
Particle size (μm)	7.1831	5.5134	7.7942

Table C2 Particle Size of Dispersed Phase of Nylon 6/ LDPE Blends (with compatibilizer).

Surlyn (%)	Nylon 6:LDPE 0.8:0.2	Nylon 6: LDPE 0.6:0.4	Nylon 6:LDPE 0.2:0.8
0.0	7.1831	5.5134	7.7942
0.1	2.6623	1.1526	2.6250
0.5	1.4805	0.6626	1.5641
1.0	1.2612	0.6723	1.3824
2.5	1.0389	1.7143	0.6500
3.5	0.8242	0.8283	0.6000

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