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APPENDIX

APPENDIX A Melt Flow Index of Raw Material

Table A1 Melt Flow Index of raw materials

Commercial grade	Symbol	MFI (g/10 min)		
		Data from supplier	Retest @ 190 C/2.16 kg	Remark (data from supplier)
H6007JU	L-HDPE	7.4	7.1	@ 190 C/2.16 kg
H5818J	H-HDPE	18	18	@ 190 C/2.16 kg
P401S	L-PP	2.6	1.2	@ 230 C/2.16 kg
P700J	H-PP	11	4.5	@ 230 C/2.16 kg

APPENDIX B Mechanical Properties of the Blends

Table B1 Mechanical properties of the blends system 1

System. 1	L-HDPE /L-PP (%wt)	Compatibilizer content (phr)	Impact strength (kJ/m2)	Tensile strength at yield (MPa)	% Strain at break (%)
System 1/1	75/25	0	5.50	28.58	35.95
System 1/2	75/25	1	5.34	28.51	34.40
System 1/3	75/25	3	5.18	28.76	29.17
System 1/4	75/25	5	5.18	29.06	27.4
System 1/5	25/75	0	5.34	34.61	24.27
System 1/6	25/75	1	5.34	35.94	124.75
System 1/7	25/75	3	5.50	36.25	121.16
System 1/8	25/75	5	5.50	36.21	153.43

Table B2 Mechanical properties of the blends system 2

System. 2	L-HDPE /L-PP (%wt)	Compatibilizer content (phr)	Impact strength (kJ/m2)	Tensile strength at yield (MPa)	% Strain at break (%)
System 2/1	75/25	0	5.50	28.58	35.95
System 2/2	75/25	1	5.50	27.03	34.12
System 2/3	75/25	3	5.34	27.55	31.63
System 2/4	75/25	5	5.18	27.58	31.84
System 2/5	25/75	0	5.34	34.61	24.27
System 2/6	25/75	1	5.18	34.75	31.84
System 2/7	25/75	3	5.18	34.40	94.02
System 2/8	25/75	5	4.86	34.32	114.00

Table B3 Mechanical properties of the blends system 3

System. 3	H-HDPE /H-PP (%wt)	Compatibilizer content (phr)	Impact strength (kJ/m2)	Tensile strength at yield (MPa)	% Strain at break (%)
System 3/1	75/25	0	5.18	28.00	28.73
System 3/2	75/25	1	4.86	26.10	27.02
System 3/3	75/25	3	4.70	25.60	25.14
System 3/4	75/25	5	4.42	26.03	31.28
System 3/5	25/75	0	5.18	34.87	176.86
System 3/6	25/75	1	4.64	34.41	147.34
System 3/7	25/75	3	4.70	34.31	149.70
System 3/8	25/75	5	4.70	34.14	145.32

Table B4 Mechanical properties of the blends system 4

System. 4	H-HDPE /H-PP (%wt)	Compatibilizer content (phr)	Impact strength (kJ/m2)	Tensile strength at yield (MPa)	% Strain at break (%)
System 4/1	75/25	0	5.18	28.00	28.73
System 4/2	75/25	1	4.86	26.41	33.93
System 4/3	75/25	3	4.70	27.13	22.50
System 4/4	75/25	5	4.42	27.46	27.24
System 4/5	25/75	0	5.18	34.87	176.86
System 4/6	25/75	1	4.64	34.88	159.80
System 4/7	25/75	3	4.70	34.98	150.95
System 4/8	25/75	5	4.70	33.54	163.56

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Presentation

2. Promvijit, P.; Brian P., G.; and Nithitanakul, M. (2012, April 24) Using two set of maleic anhydride grafted material to improve compatibility of HDPE/PP blends. Paper presented at the 3rd Research Symposium on Petrochemical and Materials Technology and the 18th PPC Symposium on Petroleum, Petrochemicals, and Polymers. Bangkok, Thailand.