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## **APPENDICES**

### **APPENDIX A**

P Nth-5/95 : The Nth pass of 5%PET blend with HDPE

P Nth-10/85/5 : The Nth pass of 10%PET blend with HDPE and 5% maleic anhydride grafted polyolefin

## APPENDIX B

**Table 4.1 Tensile strength and % strain at yield of binary blend of 10%PET/HDPE**

No. of passes	tensile strength (MPa)	%strain at yield	Modulus (MPa)
HDPE	24.84	12.64	734.9
P1-10/90	23.37	10.12	669.7
P2-10/90	23.37	9.76	672.0
P3-10/90	21.77	7.89	690.8
P4-10/90	20.96	6.31	692.6
P5-10/90	20.73	6.21	713.3

**Table 4.2 Tensile strength and %strain at yield of ternary blend of 10%PET/HDPE**

No. of passes	tensile strength (MPa)	%Strain at yield	Modulus (MPa)
HDPE	24.84	12.64	734.9
P1-10/85/5	21.82	12.96	649.4
P2-10/85/5	21.53	13.46	620.2
P3-10/85/5	21.60	12.00	641.6
P4-10/85/5	21.88	12.12	649.7
P5-10/85/5	21.20	11.66	570.2

**Table 4.3 Flexural strength of binary blend of 10%PET/HDPE**

No. of passes	Flexural strength (MPa)	%Strain at yield
HDPE	19.68	0.0750
10%PETPASS1	25.24	0.0740
PASS2	25.46	0.0768
PASS3	24.89	0.0747
PASS4	25.20	0.0759
PASS5	25.16	0.0746

**Table 4.4 Flexural strength of ternary blend of 10%PET/HDPE**

No. of passes	Flexural strength (MPa)	Strain at yield
HDPE	19.68	0.0750
P1-10/85/5	23.77	0.0786
P2-10/85/5	24.15	0.0726
P3-10/85/5	24.73	0.0709
P4-10/85/5	24.08	0.0731
P5-10/85/5	23.23	0.0721

**Table 4.5 Impact strength of binary blend of 10%PET/HDPE**

No. of passes	Impact resistance(KJ/m <sup>2</sup> )
P1-10/90	3.80
P2-10/90	3.50
P3-10/90	3.80
P4-10/90	3.83
P5-10/90	4.01

**Table 4.6 Impact strength of ternary blend of 10%PET/HDPE**

No. of passes	Impact resistance(KJ/m <sup>2</sup> )
HDPE	12.44
P1-10/85/5	9.90
P2-10/85/5	9.90
P3-10/85/5	9.80
P4-10/85/5	9.00
P5-10/85/5	9.80

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