

THERMOPLASTIC MAKING FROM CHIPBOARD WASTE

by

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TABLE OF CONTENT

APPROVAL SHEET	i
DEDICATION	ii
ACKNOWLEDGMENTS	iii
LIST OF TABLES	vi
LIST OF FIGURES	vii
LIST OF PLATES	viii
LIST OF ABBREVIATIONS	ix
ABSTRACT	x

CHAPTER

I	1.0 INTRODUCTION	1
	1.1 Objective.....	2
2	2.0 LITERATURE REVIEW	3
	2.1 Chipboard Waste.....	3
	2.2 Thermoplastic Composite.....	3
	2.3 Lignocellulosic Composite.....	5
	2.4 Polypropylene.....	6
	2.5 Maleated Anhydride Polypropylene (MAPP).....	7
	2.6 Potential of Lignocelluloses Thermoplastic Composites	7
3	3.0 MATERIAL AND METHODS	9
	3.1 Sample preparation.....	11
	3.2 Bulk Density.	11
	3.3 Mixing the Polypropylene.....	11
	3.4 Composite Manufacture.....	15
	3.5 Sample Testing.....	16
	3.5.1 Bending Test.....	16
	3.5.2 Tensile Test.....	16
4	4.0 RESULT AND DISCUSSION	17
	4.1 Mechanical Properties.....	17
	4.2 Effect of Filler Loading.....	19
5	CONCLUSION AND RECOMMENDATION	25
	REFERENCES	26

LIST OF TABLES

Table		Page
1	Experimental design of sample testing (BS 2782)	9
2	Filler loading ratio	9
3	Mould size, weight of pellets and hot pressing features	15
4	Mechanical properties of thermoplastic	18

ABSTRACT

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Thermoplastic composite was produced using chipboard waste that consisting melamine paper in combination with Polypropylene (PP) and Maleated Anhydride Polypropylene (MAPP). The various ratios of filler loading of chipboard waste to PP are 10:90, 30:70 and 30:50. The same ratio of filler loading also to combine with MAPP. The PP, MAPP and filler loading of chipboard waste were blended in Dispersion mixer at 190°C about 30 minutes. The mixtures were crushed in a crushing mixer and moulded into composite board. It was tested for mechanical and physical properties according to BS 2782 standards. The result show that the mechanical properties of FMOR, TMOR and Elongation at Break decrease significantly with higher filler loading. The chipboard waste is suitable as a filler in making thermoplastic composite.