Thermoplastic Composite Manufacture Using Ara flaker Wood Dust

By

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TABLE OF CONTENTS

		PAGE
APPROVAL SHEET		i
DEDICATION		ii - iii
ACKNOWLEDGEMENT	-	iv
TABLE OF CONTENT		v
LIST OF FIGURES		vi
LIST OF TABLE		vii
LIST OF PLATES		viii
ABSTRACT		ix
ABSTRAK		X
ADSTRAK		A
CHAPTER ONE		1
1.0 INTRODUCTION		1 2
•		
CHAPTER TWO		
		3
		3 3 3
		4
	re composite	5
<u> </u>	5	6
2.6 Recent developments in nat	ural fibre composites	7
CHAPTER THREE		
3.0 MATERIAL AND METHO	D	9-13
3.1 Evaluation at thermoplastic	composite	15
	test	15
3.1.2 Tensile to	est	17
3.1.3 Thicknes	s swelling and water	
	n	18
CHAPTER FOUR		
4.0 RESULT AND DISCUSSION	ON	19-24
CHAPTER FIVE		
5.0 CONCLUSION AND RECO	OMMENDATION	25-26
REFERENCES		27
APPENDICES		28-36
VITA		37

LIST OF FIGURE

		PAGE
1.	Flow chart wood dust (flaker) process	10
2.	Flow chart of thermoplastic composite process	11
3.	Bending Sample before test	15
4.	Bending sample after test	16
5.	Tensile sample before test	17
6.	Tensile sample after test	17
7.	Thickness Swelling and Water Absorption	18
8.	Shows the result of bending test that MOE test	20
9.	Shows the result of bending test that MOR	21
10.	Effect of wood dust on tensile test	22
11.	Effect of wood dust on thickness swelling test	23
12	Effect of wood dust on water absorption test	24

ABSTRACT

THERMOPLASTIC COMPOSITE MANUFACTURE USING ARA FLAKER WOOD DUST

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From this research in making the thermoplastic composite and also test such as bending, thickness swelling and water absorption is carried out. This test to determine comfortable using wood dust Ara (Ficus Spp) use with Manufacture flaker at 80-mesh size without MAPP. Thermoplastic composite from Ara followed from 10%, 20% and 30% of wood dust from Ara. The result showed that 20% of wood dust of Ara is most the suitable. This because from bending test showed that 20% of wood dust is very strength and was good. Using enough Polypropylene (PP) can give strength when thermoplastic making. Otherwise through the tensile test 30% was good and very suitable. Finally test are the thickness swelling and water absorption showed that the water can absorb into 10% lower than 20% and 30%. Totally using 20% is the most suitable quality for mix with PP to make the thermoplastic composite.