THERMOPLASTIC COMPOSITE FROM FLAKER WASTE

By

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ABSTRACT

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In this study, particleboard flaker waste was used to produce thermoplastic composite. Tests such as bending, tensile, thickness swelling and water absorbtion were carried out. Filler loading of 10%, 30% and 50% was used. The result showed that 10% of flaker waste is most the suitable giving high strength compared to the 30% and 50% filler loading. MAPP used as a coupling agent increases the strength of the thermoplastic. For thickness swelling and water absorption values composites with 10% filler loading showed better stability. Flaker waste was found to be suitable filler in the manufacture of thermoplastic composite using polypropylene as the matrix.