Abstract

In this study, the effect of the type of polymer including polyvinyl chloride recycling (waste Edge close-fitting machine) and high density polyethylene (Plastic Boxes) in the manufacture of composites using waste paper in two levels of 40 percent and 55 percent, the properties of composite made from they were investigated. also from maleic anhydride coupling agent for the promoter compatibility between the fibers paper waste and the matrix polymer waste at three levels 0, 2 and 4 percent was used. After making the boards, mechanical properties including bending strength and flexural modulus and tensile strength and tensile modulus and physical properties including water absorption and thickness swelling reviews measurement and data obtained using the SPSS software and block design totally random and ANOVA were used for statistical analysis. The use of 55% recycled cellulose fiber and polymer PVC, superior strength and flexural modulus and tensile strength and tensile modulus and the lowest water absorption and thickness swelling in case of using 40% recycled waste paper and polymer is PVC. The effect of coupling agents in the production of lignocellulosic composite products in quantities of 2 and 4% compared to composite products made without coupling agent has grown.

Key words: Composites -Waste paper- HDPE recycled -PVC recycled

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