Effects of Density and Press Temperature on Dried Leaves Particleboard

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ABSTRACT

EFFECT OF DENSITY AND PRESS TEMPERATURE ON DRIED LEAVES PARTICLEBOARD

Shortage of timber and material supply for furniture is one of the reason to use dried leaves as alternative material to produce particleboard. This research was aimed to determine the mechanical and physical properties of dried leaves particleboard. Besides, this study is done to evaluate the effect of density and press temperature on dried leaves particleboard. The materials were collected in UiTM area and not specify on specific species. Two variables as the density of board (500 kg/m^3, 550 kg/m^3, 600 kg/m^3) and press temperature (160°C, 170°C and 180°C) was performed. Mechanical and physical properties were determined based on Bending, Internal Bonding, Thickness Swelling and Water Absorption testing. Based on the results, the board density of 600 kg/m^3 and 180°C had the best mechanical and physical value.