

**MECHANICAL AND PHYSICAL PROPERTIES OF
PARTICLEBOARD MADE FROM OIL PALM
EMPTY FRUIT BUNCH**

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ABSTRACT

Mechanical And Physical Properties Of Particleboard Made From Oil Palm Empty Fruit Bunch

This study is conducted to determine the mechanical and physical properties of particleboard made from Oil palm empty fruit bunch and evaluates the effect of board density and resin content to board properties. Empty fruit bunch is obtained from Jengka Advanced Renewable Energy Plant (JAREP) located at Jengka 9. Particleboard is made with target board density (500 kg/m^3 , 600 kg/m^3 and 700 kg/m^3) and resin content for 3 different board density is 8%, 10% and 12% with resin used is Urea Formaldehyde (UF). The value of MOR, MOE, IB and TS of all boards is failed to pass minimum requirement according to JIS A 5908:2003 standard for Type 8 particleboard. However increase in board density and resin content gives better performance to strength of particleboard. The best result is produced by board with density of 700 kg/m^3 and resin content is 12%.