TEST HEAT VALUE OFPLASTIC FUEL *POLYPROPYLENE* EQUIVALENT OF SOLAR FUEL FROM *INCINERATOR* PYROLYSISWITH STRATEGIC DESTILATION

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ABSTRACT

Plastic waste which is the main focus for the community because plastic waste is not easily decomposed by soil and also cannot be removed by direct burning, because after direct burning there is still plastic waste that cannot be decomposed 100%. So one way is to recycle plastic waste by pyrolysis. In the pyrolysis combustion of plastic waste such as *Polypropylene, it* can produce alternative fuels equivalent to biodiesel. This study discusses how much plastic waste is used and the calorific value ofplastic waste *Polypropylene* + biosiesel. The results of this study use a minimum of 10 kg of plastic waste fuel and produce 900 ml of 18000 drops of fuel with a temperature of 250°C-350°C. while the calorific value obtained by plastic waste + biodiesel with the first sample of 100% pp fuel produces a calorific value of 41.86kj/kg, the second sample of 20% pp fuel + 80% biodiesel produces a calorific value of 45.221kj/kg, the sample the third 30% pp fuel + 70% biodiesel 45.271kj/kg, the fourth sample 40% pp fuel + 60% biodiesel produces a calorific value of 45.313kj/kg, the fifth sample 50% pp plastic waste fuel + 50% biodiesel produces calorific value 46,179kj/kg

Keywords : *Pyrolysis, Plastic Polypropylene, Calorific Value*