Analisis Viscositas Dan Nilai Kalor Bahan Bakar
Campuran Pertalite Dengan Bioaditif Minyak Cengkeh
(Analysis Of Viscosity And Heat Valuefuel Of Pertalitemixed Withoil Bioaditive Clove)
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ABSTRACT

Every year the use of motorized vehicles is increasing and the use of fuel is decreasing. The increasing number of motorized vehicles and other industries, the greater the emission of exhaust gases or pollutants that are produced, so that they can damage the environment. Alternative energy sources such as clove oil fuel, where clove oil is a good and environmentally friendly alternative additive so that reducing exhaust emissions or pollution is needed to replace pertalite fuel. In the implementation of the research, the stages used were through two stages, namely testing the viscosity and calorific value of the clove oil mixture of fuel. Where the test results for the viscosity of clove oil bioadditive is higher than the viscosity of pertalite fuel, this is indicated by the increase in the viscosity of the mixture of pertalite fuel with clove oil bioadditive, which is directly proportional to the per centage of the volume of the clove oil mixture. The more percentage of clove oil used as a pertalite fuel mixture, the viscosity value will increase, and the highest heating value is obtained in the MC 15 mixture, namely 85% pertalite + 15% clove oil with a heating value of 49.489635 Mj/kg, while for the MC mixture 20 and MC 25 produce a lower calorific value than the MC 15 mixture, this is because the mixture in MC 20 and MC 25 has a too high percentage of clove oil mixture which causes the combustion process to take longer and less than perfect, so the results of the mixture are most recommended, namely at MC 15 mixture which has the right mixture proportion and produces the highest calorific value.

Keywords : *Pertalite fuel mixture with clove oil, Calorific value, Viscosity*