THE EFFECT OF VARIATIONS IN PERTALITE AND ETHANOL MIXTURES ON EXHAUST GAS EMISSIONS IN VEHICLES4 STEP110 CC

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ABSTRACT

The use of transportation vehicles is in creasing, resulting in increasingly high level of air pollution. So we need environmentally friendly fuel to reduce exhaust emissions. One of them is a mixture of pertalite and ethanol which can reduce exhaust emissions. This research aims to determine which mixtures of 10%, 20%, 30% ethanol can reduce exhaust emissions. In testing the calorific value to determine the characteristics of the fuel. In exhaust gas emission testing to determine the CO and HC levels in 110 CC vehicles. The results of this research on a mixture of 10% ethanol produced better HC and CO levels than pertalite. The 20% ethanol mixture produces better HC and CO than the 10% mixture. The 30% ethanol mixture produces better HC and CO emissions compared to the 10% and 20% ethanol mixture. This research shows that the more ethanol mixed, the lower or better the HC and CO emission values. This shows that ethanol can affect CO and HC levels.

Keywords*: CombustionExahust Emissions, HC, CO*