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ABSTRACT

Ethanol fuel is believed to improve performance in vehicles, ethenol which is commonly found is alcoholic. This study aims to determine emissions to fuel mixture of pertamax and ethanol with variations in cold temperature (temperature 22-23 °C), normal temperature (temperature 25-26 °C), and hot temperature (temperature 30-31 °C). This method is an experiment conducted with ethanol used as the Pertamax mixture with a mixture volume of 1 liter Pertamax and 500 ml of ethanol. The average emission (HC) of ethanol and pertamax mixture at temperature (22-23 °C) = 373 ppm, temperature (25-26 °C) = 810 ppm, and temperature (30-31 °C) = 719 ppm, and pure Pertamax = 314 ppm. Average emission (CO) of ethanol and pertamax mixture at temperature (22-23 °C) = 0.04% .vol, temperature (25-26 °C) = 0.23% .vol, temperature (30-31 °C) = 0 , 30% .vol, and pure pertamax = 2.2% .vol.

Key words: ethanol, Pertamax, exhaust emissions