

**PENGARUH VARIASI PENAMBAHAN ZAT ADITIF PADA  
PERTAMAX TERHADAP EMISI GAS BUANG  
MOTOR BENSIN 125CC SOHC (*THE EFFECT OF MIXING  
VARIATIONS ADDITIVES SUBSTANCE AND PERTAMAX TO GAS  
EMISSION OF GASOLINE ENGINE 125CC SOHC*)**

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***ABSTRACT***

*Based on the use of the number motor vehicles that produce gas emissions, the addition of addictive substance is very efficient to follow government to reduce in gas emissions that are harmful to environment. The purpose of this research is to know about variations in the fuel composition that are produces the best gas emissions to environment. This research uses experimental methods with RPM idle and compare of pure pertamax 200ml, 200ml pertamax plus 1, 5, 10,15, 20ml of octane booster, 200ml pertamax plus 1, 5, 10, 15, 20ml engine cleaner, and 200ml pertamax plus 1, 5, 10, 15ml octane booster with engine cleaner. After to do testing, there are four variations of the best mix composition for the environment. The first uses variety of 200ml pertamax add 10ml octane booster exhaust gas CO 1,60% vol, HC 234 ppm, and 3,5% vol CO<sub>2</sub>, the second uses variety of 200ml pertamax add 15ml engine cleaner exhaust gas CO 1,73% vol, HC 300 ppm, and 2,80% vol CO<sub>2</sub>, the third uses variety of 200ml pertamax add 20ml engine cleaner exhaust gas CO 1,19% vol, HC 374 ppm, and 2,50% vol CO<sub>2</sub>. and the fourth uses variety of 200ml pertamax add 15ml octane booster add 15ml engine cleaner exhaust gas CO 1,44% vol, HC 285 ppm, and CO<sub>2</sub> 2,90% vol.*

***Keywords:*** Gas emissions, Fuel, octane booster, engine cleaner.