

**ANALYSIS OF THE EFFECT PERTALITE FUEL MIXING
WITH EVALUBE 2T PRO SYNTHETIC ON EXHAUST
GAS EMISSIONS ON 2 STROKE MOTOR**

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ABSTRACT

Gasoline fuel motor is one type of internal combustion engine which is divided into two, namely a 2-step and 4-step motor. One of the problem in the automotive industry is the impact of exhaust gases resulting from the combustion process that occurs in engines, especially on 2-stroke motorcycles that use side oil as a fuel mixture. These gas emissions have a level of contribution to polluting the air. To reduce the impact of air pollution caused by exhaust gas emissions need to be tested on a 2 stroke motor. This study uses a fuel mixing pertalite with Evalube 2T Pro Synthetic with a mixture of 30ml, 35ml, 40ml, 45ml and 50ml which is carried out on a 2 stroke Yamaha RX King 135 cc type motor at 2500 RPM rotation using a Gas Analyzer, the aim is to obtain emission values exhaust gas in the pertalite fuel mixture with side oil. The test method is accelerated without load. The result of the study obtained better exhaust emission values found in the 50ml side oil mixture into pertalite fuel, because it gets the lowest value of hydro carbon (HC) among other mixtures with HC values of 3561 ppm, because it is still below the exhaust emission standart set by the state minister of environment number 05 of 2006 concerning the exhaust emissions limit of old motor vehicles with a threshold value of 4,5% CO and HC 12000 ppm.

Keywords: *Gasoline fuel motor, Pertalite, Evalube 2T Pro Synthetic, Exhaust gas emissions.*