

**ANALISIS VISKOSITAS DAN NILAI KALOR
BAHAN BAKAR CAMPURAN DEXLITE DAN BODIESEL
DARI MINYAK LIMBAH IKAN**

*(Viscosity And Value Analysis Of Dextrite And Biodiesel Mixed Fuel From Fish
Waste Oil)*

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ABSTRACT

Fish oil waste biodiesel is used as a renewable alternative fuel so it is necessary to conduct a quality test of biodiesel so it is necessary to analyze the effect of viscosity testing with temperature variations of 27°C (room temperature), 40°C, 50°C, and 60°C on the heating effect of the fuel and the calorific value of the fuel. mix of dextrite with biodiesel from fish waste oil in a mixture of 90% dextrite and 10% biodiesel (B-30), 80% dextrite and 20% biodiesel (B-20), 70% dextrite and 30% biodiesel (B-30), biodiesel 100%. In the implementation of the research, the stages used in two stages, namely the first stage is the preliminary stage or the stage of making biodiesel from fish waste oil while the second research stage is viscosity testing with variations in test temperature and measurement of calorific value. Where the results of the research are the process of making biodiesel to reduce levels of FFA (*Free Fatty Acid*) or free fatty acids using rice husk ash in the esterification process. The highest viscosity value is found in pure biodiesel fuel fish waste oil at room temperature which has a value of 11.817 mm²/ s and the lowest viscosity is in fuel B-30 at 60°C which has a value of 2.923 mm²/ s. The heating value at the largest heating value is in the B-20 fuel mixture, namely 43.490 MJ / Kg and the smallest heating value is in the B-10 mixture, namely 39.583 MJ / Kg.

Keywords: Fish Oil Waste Biodiesel, Calorific Value, Viscosity