THE BENEFIT OF USES HOUSEHOLD LAUNDRY WASTE FOR PRODUCING OXY-HYDROGEN GAS (HHO) AN ALTERNATIVE FUEL

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Household laundry waste, In this case, disposed directly to drainage that located in front of their house. It can make water quality declining, particularly it make the aquatic ecosystems and human health was degraded (Yudistira, 2002). Society will try to think twice about disposing laundry directly into drainage. This research use laundry for electrolyt to produce oxy-hydrogen gas (HHO gas) with electrolysis process and it can be alternative fuel.

Variations in this research is laundry waste which have been removal process (70 % - 100 %) with electrocoagulation and laundry waste without electrocoagulation. Electrolysis performed in plastic tubes, diameter on 9 cm, height on 15 cm. Volume of electrolyte in the plastic tube is 500 mL. Limit of measure to producess HHO gas is 500 mL gas.

Time to produce 500 mL HHO gas from samples are different. Laundry waste with electrocoagulation removal process, samples I, II, III, take 47 minutes, 9,03 minutes, 9,52 minutes to produce 500 mL HHO gas, laundry waste without removal, while the laundry waste without treatment, the samples I, II, III, takes 7.19 minutes, 5.47 minutes, 30.56 minutes to produce HHO gas production of 500 mL.
Key words laundry waste, electrolysis, electrocoagulation, HHO gas.