

## ABSTRACT

*The development of cassava product is still great enough in Indonesia, such as modified starch process. Oxidation modified starch is adding oxydator process for changing characteristics of starch rheology becomes better than native starch. This research will be use ozone as oxydator because it is friendly in environment which usually used to water treatment process. The aim of this research is to determine influence of consistency, acidity, temperature, and physicochemical characteristics during ozonation process. Variable process in this research are consistency (10, 20, 30, 40 %), ozonation time (15, 30, 45, 60 minute), acidity (6, 7, 8, 9), and temperature (30, 35, 40, 45 °C). Ozonation starch process includes starch dissolved by aquadest into stirred tank reactor, and then flowing ozone into those solution. Psychochemical characteristics of starch will be determined by swelling power, viscosity, and solubility analysis. The results of swelling power, viscosity, and solubility analysis are 25,955; 2,295 %; 1471 cp. Changing of physicochemical characteristics looks very significant than native starch before modification, so hopes that using for implementation in food product.*

*Key words: oxydation starch, swelling power, solubility, viscosity.*