

## **ABSTRACT**

The Health Ministry of Indonesia  
Health Polytechnic of Surabaya  
Magetan Campus Sanitation D-III Study Program  
Final Project, June 2021

Izzul Maromi

### **EFFECTIVENESS OF TIME VARIATION OF CHROME CONCLUSION IN BATIK WASTE USING ELECTROCOAGULATION METHOD IN SIDOMUKTI BATIK INDUSTRY MAGETAN**

ix + 45 Page + 2 Picture + 13 Table

The number of batik industries, both large and household scale will produce batik liquid waste. The batik industry is one of the producers of liquid waste that has the potential to contain heavy metals. This study aims to determine the effectiveness of reducing chromium levels in batik waste using the electrocoagulation method

This type of research is descriptive. Waste samples were obtained from the Batik Sidomukti Magetan industry. The treatments carried out were 3 variations of time, namely 30, 60, 90 minutes with 5 replications.

The results of the study using a time variation of 30 minutes were able to reduce chromium content (72.90%), 60 minutes (91.93%), 90 minutes (94.20%). The most effective time variation in this study is the 90 minute variation which can reduce 94.20%.

This research can be concluded that time variation has an effect on the process of decreasing chromium content in batik industrial waste by electrocoagulation method.

Reading list : 45 (1978-2020)

Keywords : Batik Industry Waste, Electrocoagulation, Chrome