ABSTRACT

Research on the degradation of dyestuffs using wantex on a laboratory scale has

been carried out using the electrocoagulation method with 4 plates as electrodes

measuring 12 x 30 cm. Sampling was carried out every 30 minutes with the

electrocoagulation process and the influence of time, type of electrode, size of the

electrode, concentration of waste, and color of waste was able to increase the value

of the degradation efficiency of color waste. The various types of electrodes used

are aluminum and iron. Variations in the size of the electrodes used are 0,5 mm and

1 mm. Variations in the concentration of waste used are 0,1 gram/liter and 0,2

gram/liter. And the color variations of the waste used are dark blue and dark red.

The results of the photometer measurement showed that there was a color

degradation of the waste reaching a clarity level of 99,86%. This value is far more

than previous studies which only reached 88,51% at 180 minutes and 12 volts.

Keywords: Electrocoagulation, color waste, degradation

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