**Degradation Electrochemical Remazol Black B Using Electrodes Carbon Past Nanopore**

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# *ABSTRACT*

Electrochemical degradation of*remazol black B* in waste sasirangan using electrodes carbon paste nanopores has been studied. This study aims to determine the optimum conditions include the potential degradation, pH, time degradation and characterize the degradation product of *remazol black B* and impairment of COD value. In this study the electrochemical degradation used carbon paste electrodes nanopore (anode) and the silver wire (cathode). The results showed that the optimum state of degradation *remazol black B* on potential 9 Volt, pH 7 and the optimum time of 35 minutes for degradation 50 mL remazol black B 50 ppm. Degradation *remazol black B* to produce compounds that are not dangerous, and can be directly discharged into the environment with the COD after degradation for 90 minutes at 105.608 ppm with reducing of COD is 65.37%. LC-MS results showed that *remazolblack B* has been degraded completely and the result of degradation is composed with CO2, just little hypochlorite ion (OCl-) and chloride ions (Cl-) which is not harmful to of environmental. Application of sasirangan liquid waste degradation using carbon paste electrodes nanopore was able to reduce COD and BOD levels respectively by 82.353 and 40.19 ppm which is not harmful to the environment.

***Keyword*** : *Remazol black B*, electrochemical degradation, electrodes carbon paste nanopore and sasirangan waste

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