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KARNATAKA STATE COUNCIL FOR SCIENCE AND TECHNOLOGY

IISC, BANGALORE

A PROJECT REPORT ON

REMOVAL OF COLOUR AND COD BY ELECTROCHEMICAL AND ELECTROCOAGULATION (EC) PROCESS FROM DISTILLARY SPENT WASH

INTERNAL GUIDE
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ABSTRACT

Molasses-based distilleries are one of the most polluting industries generating large volumes of high strength wastewater. While colored organic compounds generally impart only a minor fraction of the organic load to wastewaters, their color renders them aesthetically unacceptable. Here studies have been carried out in reduction of color and COD from distillery spent wash by Electrochemical or electrocogulation method. The process was carried out with dilution (50% concentrated) by adding tap water and treated with aluminium (anode) and Stainless steel (cathode). This showed a good reduction in color (82-92%) and COD (22-30%).The optimized parameters for the process are Electrode distance 1cm, initial pH 4, current density 8 Amp/dm^2 for 2 hours and color and COD reduction observed are 89.01% and 22.80% respectively.

Key words: Decolorization; Distillery; Molasses; Spentwash, electrocogulation