

TREATMENT AND CHARACTERIZATION OF WASTEWATER FROM VARIOUS DYEING INDUSTRIES USING DIFFERENT ADSORBENTS

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ABSTRACT

Industrial based research project using different types of adsorbents for the treatment of liquid waste generated from various dyeing industries. The effluents generated from dyeing industries impart high pollution problems. The research is based on the treatment and characterization of effluent wastewater collected from dyeing industries of Saurashtra region using different adsorbent like High Adsorbent Silica (HAS) and Activate Carbon (AC). As the effluent generated by dyeing industries contains considerable amount of chloride, acidity, BOD, TDS, DO and many other undesirable parameters. These pollutants are found to have carcinogenic, mutagenic effects on human beings. It will also cause growth problems in fresh water animals. This will lead to severe environmental pollution problems. The study focuses on use and comparative effectiveness of two adsorbent HDS and AC to reduce and arrest the severity of pollutants present in the dyeing effluent.

KEYWORDS: Industrial Effluent, Dyeing Industries, Activated Carbon, Pollutant, High Adsorbent Silica, Adsorbent