



Chemical treatment of polluted waste using different coagulants

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ABSTRACT

Textile industry is a very diverse sector in terms of raw materials, processes, products and equipment and has a very complicated industrial chain. Wastewater treatment is one of the major problems faced by textile manufacturers. Environmental problems of the textile industry are mainly caused by discharges of wastewater. Coagulation is a widely used method for the treatment of several wastewaters industrial streams. In the present paper several types of coagulant have been used for the treatment of a certain textile effluent. Ferric chloride, lime and alum have been examined in their effectiveness of reducing chemical load of the effluent. The implementation of those coagulants decrease the COD up to 53.9% using lime, up to 65.7% using ferric chloride and up to 81.7% using alum. The results are very useful for the optimizations of several chemical treatments of waste streams from small industries.

Keywords: Coagulation; Textile wastewaters; Chemical Treatment; COD reduction

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