

USE OF SOLID WASTE FROM SURFACE TREATMENT OF ALUMINIUM AS COAGULANT

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ABSTRACT

In this work are presented the results obtained with the use of aluminium anodising waste in the treatment of paint industry wastewater. It was studied the applicability of aluminium anodising sludge as coagulant. The sludge was submitted to a stabilisation process and homogenised. A series of tests was made, being controlled important parameters as pH, turbidity, coagulant dose, agitator type, stirring conditions (time and speed) and settling time. Different coagulation conditions were tested in order to establish the optimised treatment. The pollutant removal (COD and some metals) was obtained through the characterisation of the treated wastewater.