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DISSOLVED AIR FLOTATION APPLIED FOR CHROME REMOVAL FROM WASTE SOLUTION

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Abstract

In this paper, experimental results obtained in the study of the flotation process with dissolved air, for chrome removal resulted from chrome plating sector are presented. Using sodium lauryl sulphate as collector and through process parameter optimization (molar ratio collector: coligand = 0.5, pH 8), a chrome removal efficiency of over 95 % was obtained. Kinetic study of the process has shown a first order kinetics with breaking point.

Keywords: chrome, waste solution, dissolved air flotation, sodium lauryl sulphate

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