

ABSTRACT

Spent liquor was taken from East Pakistan Chrome tannery (EPCT), Sheikhpura, Lahore for the sake of Recovery of chrome from Spent Liquor. Spent liquor contains large quantity of Chromium which is tremendously hazardous environmental pollutant if discharged along with tannery waste water.

Hence, Recovery of this chromium from spent liquor is essential. Optimization condition has been investigated in this study. Two basifying agents NaOH and MgO have been used for complete precipitation of chromium as chromium hydroxide. This has been investigated at different pH because hydrolysis of chromium is different at different pH values. Proximate analysis has been carried out in this respect. NaOH is a quick astringent and precipitation take place readily however recovery process with MgO is slow, time and cost consuming.

Recovery with NaOH is more economical as compared to that of MgO.

The best suitable pH value is 9.0 at which Recovery of Chrome from Spent Liquor is Maximum. Beyond this pH value, No Considerable Change is observed.

%age recovery is about 98 % with that of MgO while it is about 96 % with NaOH at pH 9.0.