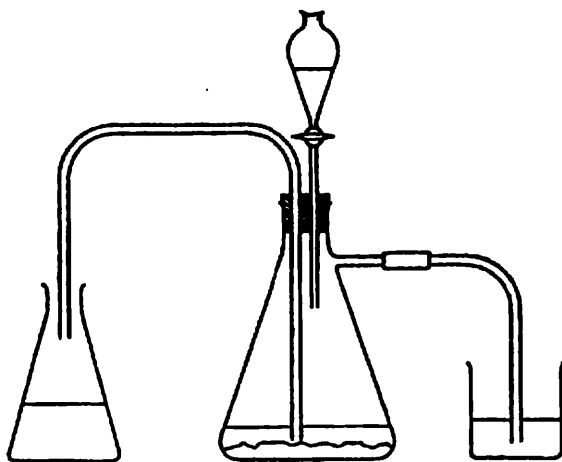


11. Chromous Acetate*

Preparation:

Set up the apparatus shown in Figure. A Büchner flask is fitted with a two-hole stopper through which passes a dropping funnel and a tube that reaches right to the bottom of the flask. The side tube of the Büchner flask is connected by a short piece of rubber tubing with a tube which dips under water to absorb hydrochloric acid fumes. In the flask put 3.3 grams of powdered potassium dichromate and 17 grams of mossy zinc. Meanwhile prepare a solution of 30 grams of sodium acetate hydrate in 27 ml of water. If this had to be heated to make the sodium acetate dissolve it must be cooled before use. Add through the dropping funnel dilute hydrochloric acid made by mixing 50 ml of concentrated acid with 25 ml of water. (You probably will not need all the hydrochloric acid.) A vigorous reaction takes place. Add acid to keep the reaction going until the liquid in the flask has become a pure blue in color. The chromium is now all in the chromous condition. While the hydrogen is still being rapidly evolved, pinch the rubber connection on the side tube with the fingers, forcing the solution in the flask out of the other tube and into the sodium acetate solution that is contained in a 100-ml Erlenmeyer flask.



* H.F. Walton, "Inorganic Preparations", Prentice-Hall, Inc., Englewood Cliffs, 1948.