

THE U. S. P. X NITRATE TEST AS APPLIED TO SOLUTION FERRIC CHLORIDE.*

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During the course of an examination of a sample of solution iron chloride, the prescribed U. S. P. X Test for nitrates using ferrous sulphate and sulphuric acid was used and produced a brownish ring at the junction of the two liquids.

When the same sample was subjected to the nitrate test, given under potassium iodide in the U. S. P. X, wherein solution of sodium hydroxide and metallic aluminum are used, no test for nitrates was indicated.

Other radicals than nitrates may give a reaction in the above-named ring test and in order to verify the results obtained in the above aluminum sodium hydroxide test, two solutions of ferric chloride were prepared in neither of which any nitric acid was used. In one case the mixture of ferrous chloride and hydrochloric acid was oxidized by adding hydrogen peroxide and heating; in the other, gases which are generated by the action of hydrochloric acid on potassium chlorate were used to oxidize the ferrous chloride and hydrochloric acid. In the preparation of these solutions care was taken to dispel all excess chlorine or peroxides by heating for two hours on the water-bath.

These ferric chlorides were tested according to the U. S. P. "ring" test and brown "rings" were obtained in each case. This seemed to prove that the U. S. P. X nitrate test was caused by something besides nitrate since we had not used any nitric acid in the manufacture. To make sure we applied the test to each of the constituents of the two solutions we made. Negative tests resulted in each instance. But, when we applied the test to a mixture of the hydrochloric acid and the oxidizing agent (it did not matter whether it was the peroxide or the chlorine gases) a brown ring was formed.

These experiments show that if iron chloride yields a positive U. S. P. X nitrate test it may not be due to nitrate, but to the presence of hydrochloric acid and an oxidizing agent.

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WHAT DRUGGISTS ASK AN EDITOR.†

BY WALTER M. CHASE.¹

During the past few days we have heard more or less about Dr. Charter's report on "What the Druggist Should Know." The Commonwealth investigation has been a most complete one, involving several years of intensive study, and its findings will be of incalculable value and interest to everyone connected with the profession of pharmacy.

However, there is sometimes a considerable difference between what a man should know and what he wants to know, and it was with the idea of determining what things fall into the latter classification that I started to assemble the material that forms the basis of this paper.

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