

sulphite has been dissolved, over about 2 Cc. of the concentrated sulphuric acid, no reddish zone should appear and no precipitate should form (selenium).

Tin, Sn.—Pure metallic tin in the granulated or mossy condition. Digest 5 Gm. of tin with 40 Cc. or a sufficient quantity of nitric acid (Acidum Nitricum, U. S. P.), on a bath of boiling water until entirely converted into a white powder, then evaporate it completely to dryness. Stir the residue with 25 Cc. of diluted nitric acid and 25 Cc. of distilled water and filter it. To the filtrate add 1 Cc. of diluted sulphuric acid (Acidum Sulphuricum Dilutum, U. S. P.), evaporate it as far as possible upon a water-bath, and to this add 10 Cc. of distilled water; no weighable residue should remain undissolved (lead). When converted into stannous chloride it should comply with the tests directed under that salt.

Zinc for Arsenic Test.—The Zinc should preferably be in globular form, about 3 to 6 mm. in diameter, known as No. 7 Shot Zinc. It should be free from sulphur and phosphorus. The stain from 8 Gm. of Zinc should scarcely be perceptible when determined by a blank experiment.

Heavy Metals Test.—This test is to be used to detect the presence of undesirable metallic impurities in official chemical substances or their solutions; these should not respond affirmatively within the stated time. Acidulate 10 Cc. of a solution of the substance in distilled water (1 in 50) contained in a test-tube of about 40 Cc. capacity with 1 Cc. of diluted hydrochloric acid (unless otherwise directed), warm it to about 50° C., add an equal volume of freshly prepared hydrogen sulphide T. S., and allow the mixture to stand in a well-stoppered test-tube, in a warm place, at 35° C. for half an hour. At the end of this time the mixture should still possess the odor of hydrogen sulphide; if not, it should be thoroughly saturated with the gas and again set aside for half an hour. Any change in the color of the solution which is being tested should be noted by comparison with the same volume of the hydrogen sulphide T. S. (which has been likewise acidulated), when viewed crosswise by reflected light while held against a white surface.

GREAT PURCHASE OF SUGAR.

The Western Mail states that in consequence of the cessation of the British supply of beet sugar from Germany, Austria, and Belgium, Mr. McKenna, Home Secretary of the British Government, has purchased 900,000 tons of raw sugar at about £20 (\$97.33) per ton, the transaction involving an outlay of about £18,000,000 (\$87,597,000). The sugar has been purchased in Demerara, Java, Mauritius, and other places. This is by far the largest purchase of sugar which has ever been made. The sugar is to be sold virtually at cost price to the refiners, who by arrangement with the Government have agreed to sell the commodity when refined to the dealer at a fixed price based upon the cost of the article, plus a fair manufacturing profit.