Using syrup in place of sucrose, the following alternative formulas result.

Formula 1.

Diluted hydriodic acid	130 cc.
Syrup	530 cc.
Distilled water q. s.	1000 cc.

Formula 2.

Hydriodic acid (45%)	21.2 cc.
Syrup	530.0 cc.
Distilled water q. s.	1000.0 cc.

By use of these formulas, a first-class product may be quickly prepared and the entire procedure is economically sound.

SUMMARY.

1. Since pure, concentrated hydriodic acid is commercially available in a stabilized form, it is scarcely advisable for the pharmacist to prepare this acid.

2. It is suggested that the process for the preparation of Diluted Hydriodic Acid be deleted from the U. S. P.

3. It is suggested that the U.S.P. XI adopt standards for a concentrated hydriodic acid containing 45% of hydriodic acid and 3.15% of hypophosphorous acid. The present official Diluted Hydriodic Acid would be made by diluting the 45% acid with water.

4. Syrup of Hydriodic Acid should be freshly prepared by the retail pharmacist as needed or at frequent intervals.

REFERENCES.

(1) "National Standard Dispensatory," third edition, page 51.

(2) Mellor, "A Comprehensive Treatise of Inorganic and Theoretical Chemistry," Vol. II, page 172.

(3) Wooton, "Chronicles of Pharmacy," Vol. 1, page 352.

(4) Dr. A. Buchanan, *Lond. Med. Gaz. and Amer. Jour. of Med. Sci.;* through *Amer. J. Pharm.*, 9 (1838), 175–177.

(5) "Proc. National Conference on Pharmaceutical Research," 1929–1930, page 21.

(6) "Proc. Amer. Drug. Manuf. Assoc.," 1930, pages 264–265.

(7) *U. S. P. XI Circulars*, General Committee, Vol. I, page 44.

(8) C. E. Smith, JOUR. A. PH. A., 1 (1912), 298.

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PURIFICATION OF DYNAMITE AND SAPONIFICATION GRADE GLYCERINS.*

BY A. E. BRIOD AND W. G. CHRISTIANSEN.

The purification of glycerin obtained from fatty sources has always involved an expensive distillation process. Thus a single distillation of saponification grade glycerin yields the so-called dynamite glycerin and a redistillation of this dynamite glycerin finally yields a "chemically pure" or "double distilled" glycerin. During

* Scientific Section, A. PH. A., Baltimore meeting, 1931.

the course of an investigation of the possibility of using other methods for the purification of dynamite and saponification glycerins, a new process was developed, involving a liming operation similar to that used in the sugar industry. The glycerin produced by this process is not of U. S. P. grade, but it is white and almost odorless and should find applications in several industrial fields. It is also superior to the refined white glycerin obtained by charcoal treatment of dynamite and saponification glycerin.

The purification of a good grade of saponification glycerin is carried out as follows:

The saponification glycerin is diluted with water to a hydrometer, reading of 16° Bé., and pure lime corresponding to about 5% of the glycerol present is added. The mixture is stirred at room temperature for half an hour, and then the temperature is raised to 80° C. and maintained at that temperature for half an hour while the stirring is continued. Carbonation with CO_2 is then started and continued at approximately 70° C. with constant stirring. The carbonation is considered complete when the mixture has become neutral to litmus paper.

The calcium carbonate and impurities are filtered off while the glycerin is still hot, and the filtered glycerin is again diluted to 16° Bé. with water. Heating is resumed and at 95° C., powdered charcoal equivalent to 3% of the glycerol present is added. A mixture of bone black and Nuchar is suitable for this operation. After stirring for about one hour, the hot mixture is filtered; a water-white glycerin containing about 60% glycerol is obtained.

This glycerin may be used for some purposes without any further concentration.

If a concentrated glycerin is desired, it is best obtained by vacuum distillation of the water, with or without steam blowing. The temperature of the glycerin thus treated must not be allowed to rise above 135° C., however, if the color of the finished product is to be kept as nearly water white as possible.

An additional treatment of the concentrated glycerin with 2% Nuchar for half an hour at 70° C. finally yields a white and nearly odorless glycerin of excellent taste.

Though tests on this finished glycerin show that it does not come within U. S. P. limits, it is an exceptionally good grade of refined industrial glycerin.

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THE ACTION OF SOLUBLE IODIDES ON STRYCHNINE SULPHATE.

BY GEORGE W. HARGREAVES.

This investigation was brought about by the conflicting opinions in the literature found by the writer when gathering material for a course in incompatibilities in prescriptions.

The precipitation of strychnine and its salts by alkali iodides has been denied by some investigators and upheld by others. Furthermore, the precipitation has been said to be due to various causes, namely, alkalinity of the iodide, salting out of the strychnine salt, formation of the hydriodide and formation of a complex iodide.