

in the melting points of the examined samples of acetylsalicylic acid seem to indicate a greater or lesser degree of purity. The question has also arisen if Aspirin-Bayer contained a "tracer" in order to distinguish it from the acetylsalicylic acid of other manufacturers. Up to the present time the writer has been unable to detect such a "tracer."

INCOMPATIBILITY.

From the standpoint of a pharmacist the editor of *The Practical Druggist* takes this opportunity to mention the principal incompatibilities, namely, heat, moisture, alkalis and their carbonates and bicarbonates.

Acetylsalicylic acid or aspirin should be preserved in well-stoppered bottles in a dry place. The author must express his surprise that the manufacturers who in former years employed bottles have discarded the same and are now using cartons as containers.

When aspirin powders are ordered it is best to dispense these in parchment paper, so as to prevent decomposition through the influence of moisture.

PRESERVATION OF SPIRIT OF NITROUS ETHER.

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I know that this is an old subject and you may feel that it has been threshed to the limit, yet there are many druggists today who do not keep this preparation under the proper conditions, either because they do not know how to do it or because they do not care to take the little time necessary to do it. Hence this discussion.

With sample No. 1 we tried to duplicate the condition found in many drug stores. The solution was kept in a pint, colorless bottle in the laboratory and opened from time to time to remove some of the solution. You will note that this solution lost 31 percent from December to February. In the case of samples Nos. 2 and 3, kept in 1-oz. full bottles sealed with sealing wax and paraffin and stored in the basement, you will note that from December to May these solutions lost but 4.4 percent. Samples Nos. 4, 5 and 6 were kept under similar conditions to those of samples Nos. 2 and 3, except that the bottles were one-half full. You will note that these samples lost from 9 to 12 percent in a little over a month. In the case of the rest of the samples, we attempted to determine whether this solution would keep better if made with stronger alcohol. It has been claimed that the small amount of water in U. S. P. alcohol causes hydrolysis and therefore more rapid decomposition of this product. The results of our experiments do not seem to bear this out. However, we have not done sufficient work with this to feel sure that we are right.

In conclusion, I would say that this solution will keep very well if put up into 1-oz. or 2-oz. bottles, the bottles filled and sealed with sealing wax or paraffin and stored in a dark, cool place. Many druggists think that this is too much work. This is a very wrong idea. I think that, if you try it, you will find that,

STUDY OF THE BEST CONDITIONS FOR KEEPING SOLUTIONS OF SPIRIT OF NITROUS ETHER.

All samples made from Smith, Kline & French concentrated tubes of ethyl nitrite.

Samples	Location	Dec. 14, 1911	Jan. 5	Jan. 10	Jan. 17	Jan. 24	Feb. 11	Feb. 22.	Loss %
1 tube made up to pint and conditions found in drug store, duplicated.....	Laboratory	4.2	4.13	4.04	3.9	3.69	3.37	2.89	31.0
1 oz. plain bottles sealed with sealing wax. Bottles full	Basement	3.82	Feb. 15 3.64			Mar. 8 3.71		May 8 3.65	4.4
1 oz. full bottles, sealed with paraffin, colorless bottles	Basement	3.83	3.89			3.79		3.65	4.4
2 oz. amber bottles, one-half full, sealed with sealing wax	Basement	3.82	....			3.46		....	9.5
2 oz. amber bottles, one-half full, sealed with sealing wax	Laboratory	3.82	....			3.39		....	11.3
2 oz. colorless bottles, one-half full, sealed with paraffin	Basement	3.82	....			3.35		....	12.3
	Bottles Alcohol								
Kept in 8 oz. bottles	Amber 99.18%				Feb. 22 4.48	Mar. 22 4.26	Apr. 10 4.27	May 8 3.93	12.2.
	Colorless 99.8%	Laboratory			4.48	4.24	4.35	3.98	11.2
	Colorless 98.2%	Laboratory			4.36	4.39	4.21	3.87	11.2
	Amber 98.2%	Laboratory			4.36	4.22	4.24	3.89	10.8
	Colorless 95%	Laboratory			5.38	5.01	5.29	5.01	6.9

when your solution is made up, it will take but 10 or 15 minutes to store it as directed, and then you will feel reasonably sure that your product will bear careful inspection and that your customers receive what they pay for.

The fact that many doctors do not prescribe spirit of nitrous ether today because they feel that they cannot get a standard preparation, casts a reflection upon the ability and carefulness of the druggist. I believe that the druggist will be more than repaid for the little time he spends in taking precautions to keep his stock under the conditions necessary to insure the best possible preparation, and perhaps in no case are precautions more necessary than they are in the keeping of spirit of nitrous ether.

WHAT IS MEANT BY DRUG STANDARDIZATION?*

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A visiting physician of one of the large Philadelphia hospitals called me up by 'phone for information regarding the failure of fluidextract of apocynum to relieve dropsy in three patients under his care. Finding that he did not know whether or not the fluidextract had been standardized I suggested the use of a standard preparation. Three or four days afterward my medical friend again called me up to report that the standardized fluidextract procured at my suggestion was promptly effectual, and said, "If standardization means so much for other drugs it is about time for the medical profession to awaken to its importance."

A prominent Canadian physician to whom I was demonstrating the modern methods of drug standardization in the laboratory said, "The medical profession knows in a general way that drugs vary in strength but only few physicians are aware of the wide variations in such important drugs as digitalis, strophanthus, and apocynum demonstrated here today. We know that bicarbonate of sodium is pure and other lots are purer. This is about my limit of knowledge, but that digitalis fluidextracts on the market may vary 300 percent in active constituents, and strophanthus fluidextracts show a variation of 6000 percent is an eye-opener to me."

The importance of drug standardization is so great that all intelligent persons, laymen as well as members of the medical and pharmaceutical professions, should be informed of its value. For without this knowledge physicians do not realize the necessity of discriminating in favor of standardized products when prescribing, pharmacists do not appreciate the necessity of standardizing their products, or purchasing their supplies from manufacturing houses engaged in standard-work; and people ignorant of the fact that preparations of the same name may differ so widely as to be dangerous to life, take prescriptions to drug stores where they can get them compounded the cheapest, without regard to the character, quality and strength of the ingredients that enter into them.

One of the first things of importance to consider in drug standardization is nomenclature. To every drug a name must be given by which it may be in-

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