

TABLE I.

No.	CONC. SODIUM SALICYLATE. Molar.	Gm. in 200 cc.	CONC. SODIUM BICARBONATE. Molar.	Gm. in 200 cc.	No. of days when discoloration appeared.
1	0.172	5.524	1.00	16.80	5 dark brown
2	0.172	5.524	0.50	8.40	9 dark brown
3	0.172	5.524	0.10	1.68	13 dark brown
4	0.172	5.524	0.01	0.168	30 light brown
5	0.172	5.524	0.001	0.0168	46 very light brown
1	0.344	11.05	0.2	3.36	10 dark brown
2	0.172	5.524	0.2	3.36	14 dark brown
3	0.086	2.762	0.2	3.36	35 dark brown
4	0.0086	0.276	0.2	3.36	35 light brown
5	0.00086	0.028	0.2	3.36	46 no discoloration

Influence of Concentration.—In order to study the influence of concentration upon the rapidity of darkening in this mixture, two series of solutions were prepared. One in which the concentrations of sodium salicylate were kept constant and the concentrations of sodium bicarbonate varied and another in which the concentrations of sodium bicarbonate were kept constant and the concentrations of sodium salicylate varied.

Table I records the observations made upon these solutions stored in partially filled flint flasks in diffused daylight.

The results included in Table I indicate that the rapidity of color change is a function the concentration of either the sodium salicylate or the sodium bicarbonate. The greater the concentration of either, the more rapid will be the change in color.

An analysis of several samples during the formation of and presence of a deep black color indicated that the loss of salicylic acid by this color change is insignificant.

CONCLUSIONS.

1. Purified natural sodium salicylate darkens in aqueous solution in the presence of sodium bicarbonate.
2. The rapidity of the occurrence of the darkening phenomenon is a function of the concentration of either the sodium salicylate or the sodium bicarbonate.

PHARMACEUTICAL RESEARCH LABORATORY,
SHARP AND DOHME, BALTIMORE, MARYLAND.

ABSTRACTS OF SCIENTIFIC PAPERS, 1929.

"The Therapeutic Activity of Neoarsphenamine," by Alfred E. Jurist and W. G. Christiansen.

Some studies on the toxicity and therapeutic index of Neoarsphenamine are presented showing the wide range of variation in this product and the existence of at least one product with a therapeutic index closely

approaching that of arsphenamine. Some discussion of the relation between the chemical, physical and colloidal characteristics and therapeutic index of Neoarsphenamine is presented.

"Food as a Preventive Medicine," by E. A. Ruddiman.

Discussion importance properly balanced diet of proteins and carbohydrates. Effect dietary content of vitamins mentioned, also importance of certain minerals.