ABSTRACTS

David Wesson, *Abstract Editor*

In the determination of saponification numbers of fats and oils, addition of a small quantity of sodium thiosulfate (5 grams per liter) to the alcoholic caustic potash reagent is said to be effective in preventing coloration of the solution. When the clear supernatant liquid is used for the determination of saponification values, the results obtained with this reagent agree with those obtained with the official reagent. At attempt to find a general inhibitor for color development during the saponification process has been unsuccessful.—*J. Assoc. Off. Agric. Chem.*, 12, 248—50 (1929).

Recent investigations of the composition of the mixed glycerides in cacao butter have resulted in the following general estimate of its composition: saturated glycerides 2.5%, (mainly mixed palmitostearins), monooleodisaturated glycerides 77%, dioleo-monosaturated glycerides, 16%, and triolein 4%. *J. Soc. Chem. Ind.* 48, 41-6T (1929).

Products suitable for use in the textile and leather industries, as wetting, cleaning and emulsifying agents, and which appear to be true sulfonic acids, are formed by treating aliphatic acids of high molecular weight such as oleic acid or linoleic acid with sulfuric acid in the presence of organic acid anhydrides or chlorides such as acetic anhydride or acetyl chloride.—Brit Pat. No. 298,559.

In the determination of iodine values, the results obtained by the method of Hanus with a solution of bromiodine in acetic acid are said to be lower than the values obtained by the Hübl method. If the acetic acid is not anhydrous, the strength of the solution decreases on standing and the iodine is not in excess sufficient to saturate the second double bonds, within the conditions of the test. Therefore the same solution may give lower values with the same oil some weeks later. The method of Wijs with chloriodine is more reliable.—*Bull. sci. pharmacol.* 35,692-8 (1928).

Masao Nonaka, a Japanese physical chemist, has conducted some interesting experiments which tend to prove that the washing property of soap, which is caused by adsorption, varies with the nature of the material washed. Nonaka's studies involved observations on the adsorption of soap at the contact surface between benzene or toluene and an aqueous solution of sodium oleate or palmitate. He found that the adsorbed quantity is larger than the value calculated on the monomolecular layer theory, which led him to conclude that the adsorbed layer is monomicellar rather than monomolecular, and that it consists of neutral soap, the free fatty acids being dissolved in the adsorbents. When air was used as an adsorbent instead of benzene or toluene, the adsorbed layer consisted of the neutral soap plus the free fatty acids. *J. Soc. Chem. Ind. (Japan)*; *Suppl. Binding* 31, 73 (1928).

From lathering experiments on several commercial soaps, in which the soap solution below the lather was made up again to the original volume, reshaken and the operation repeated until little or no lather could be produced, it was concluded that 0.15% soap is the optimum concentration for best lathering and that the "active" soap can be removed from solution by repeated shaking as above.—*Z. phys. chem. Seifenforsch* 2, 18-22 (1929).

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