ABSTRACTS

Soaps

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Flake soaps. Soap **14,** 4, 61 (1938).—The fat stock used for flake soaps is about the same as that for toilet soap. If it is desired to have the flakes readily soluble in cold water, the proportion of soft fats is increased. It is good practice to make a special soap from light-colored fatty acids by the semi-boiled process, using a mixture of potash and soda for saponification. This soap, because of absence of sodium chloride, has considerably more plasticity than grained soap and a certain proportion is added to the settled soap, usually 5 to 10%. The addition can be made before drying or the potash acid soap can be dried and then mixed in with the flake soap.

Experiments show that if during graining the content of free alkali is 0.4 to 0.6%, the settled soap would have an alkalinity of 0.12 to 0.15%. The content of sodium chloride during graining is preferably about 0.9%.

The soap which is to be readily soluble in cold water may contain around 40% of coconut oil. This soap is best prepared from fatty acid where possible as it will then be free from salt and brittleness.

Liquid soap from fatty acids. Seifensieder-Ztg. **65,** 62 (1938).—Liquid soaps made from fatty acids should not be exactly and carefully neutralized, but should contain from 0.05 to 0.1 excess of free alkali. Such a product will be more satisfactory and will not be harsh on the skin to any appreciable extent. The excess alkali tends to stabilize the soap and keep the solution clear, which may not be the case in an exactly neutralized product.

Behavior of sodium glycocholate with various fatty acids and soaps. II. Behavior with various soaps. K. Holwerda. Biochem. Z. **295,** 11-28 (1937). —The surface tension and foaming of soap solns. were detd. with increasing concns. of Na glycocholate. In solns. of a series of pure soaps the surface tension reaches a min., while foaming attains a max., at a certain chain length. But in systems contg. Na glycocholate the surface tension of the soap solns. generally decreases with the increase in the C chain and the foaming increases. In most instances opt. foaming is obtained with a definite amt. of glycocholate. The mechanism of this process is discussed. (*Chem. Abs.*)

Rapid determination of combined oleic acid in soap solution. V. A. Gruzdev and B. L. Zal'tsman. *Org. Chem. Ind.* (U. S. S. R.) **4,** No. 13, 38 (1937).— The detn. is based on the reaction: $2\ C_{17}H_{33}CO_2NH_4 + Ba(NO_3)_2 = (C_{17}H_{33}CO_2)_2Ba + 2NH_4NO_3$. Shake to foaming 25 cc. of the soap soln. in a dry, glass-stoppered flask and titrate with 0.1 N $Ba(NO_3)_2$. After each addn. of 2-3 drops of $Ba(NO_3)_2$ shake well, let stand for a few seconds and continue with the titration until the foaming has stopped. (*Chem. Abs.*)

Solvent soaps. A. Davidsohn. *Öle, Fette, Wachse, seife, Kosmetik* **1938,** No. 2, 1-5.—Review of literature and patents on soaps contg. org. solvents and dry-cleaning soaps. The boiling range or b.p., flash point and sp. gr. of 25 solvents that are used in soap are tabulated. Method of prepn. and formulas for several types of the soaps are included.

New Method for the synthesis of glycerides. II. P. E. Verkade, J. van der Lee, J. C. de Quant and E. de Roy van Zuydewijn. *Proc. Acad. Sci., Amsterdam,* **40,** 580-3 (1937).—Review of the literature to establish the originality of the method and its variations previously reported by Verkade and his students. Sixteen references. (*Chem. Abs.*)

PATENTS

Polishing composition suitable for use on furniture, floors, automobiles, etc. U. S. 2,108,214, Feb. 15. Leroy W. Shuger (to Baltimore Paint and Color Works). An emulsion polishing compn. resistant to weather ravages contains an odorless, stearin-free fish oil, together with a mineral oil and water, etc. (*Chem. Abs.*)

Wetting, emulsifying, dispersing and cleansing agents. Andre Butignot (to Compagnie nationale de matieres colorantes et manufactures de produits chimiques du Nord reunies etablissements Kuhlmann). U. S. 2,107,197, Feb. 1. A ketone derived from stearic acid or other aliphatic ketones of the general formula $R\text{-}CO\text{-}CH_3$, in which R represents an aliphatic chain contg. 6-18 atoms of C are monohalogenated, as by treatment with Cl, and the halogenated ketones are condensed with agents such as an alkali metal sulfite contg. a solubilizing group and a reactive H. (*Chem. Abs.*)

Anti-fogging composition for use on glass windows, etc. James T. Benton. U. S. 2,107,361, Feb. 8. Glycerol 1 gal. is used with camphor 4 oz., turpentine a half pint, K oxalate 1 lb. and oxalic acid 4 oz. (*Chem. Abs.*)

Saponification apparatus. Louis A. Rouget and Jean D. Rouget. French 818,348, Sept., 1937. The fatty acids and the sapong. agent meet in the form of jets in the reaction vessel. (*Chem. Abs.*)

Treating glass wool for insulation or filtration. Hugh M. Bone and Robert C. Williams (to Owens-Ill. Glass Co.). U. S. 2,107,284, Feb. 8. An oil-in-water emulsion for application to glass wool to produce an oleaginous coating upon it comprises a hydrocarbon material such as bright stock oil about 20-40, a fatty acid such as oleic acid about 12.6 to 18.5, a volatile alk. agent such as aq. NH_3 up to about 4% and water. (*Chem. Abs.*)

Soap compositions. Chemische Fabrik Grünau Landshoff & Meyer A.-G. German 654,166, Dec. 11, 1937 (Cl. 23e. 2). The lathering capacity of soap is improved by incorporating with the soap a condensation product of a higher aliphatic acid with an albumin degradation product of high mol. wt. The method is particularly useful in the manuf. of shaving soaps or creams. An example is given. (*Chem. Abs.*)