oil being present in an amt. sufficient to dissolve the desired quantity of fat-soluble vitamin but not in excess of 25% by wt. of the finished product; said casein being present in an amt. sufficient to maintain said oil globules uniformly and permanently suspended, but not in excess of 20% by wt. of the finished product.

COMPOSITION OF MATTER. A. K. Epstein. *U. S. 2,299,743.* A composition of matter comprises predominantly soya bean phosphatides, vegetable oil or fat, monostearin, and the residue resulting from the interaction of said soya bean phosphatides with lauroyl peroxide.

MODIFYING FATTY OILS. Laszlo Auer. *U. S. 2,300,090.* In the modification of fatty oils for use as bases of coating materials and plastics, the process comprises mixing the oil with a minor amt. and not more than 30% of a halogen salt, and heating the mixt. to a temp. between about 200° and 350° C. but not above the boiling or decomp. point for at least 30 minutes.

LUBRICANT. L. A. Mikeska (Standard Oil Co.). *U. S. 2,300,131.* Phenolic esters of fat acids or chlorinated fat acids are used as pour point depressors for hydrocarbon lubricating oils.

Abstracts

Soaps

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LAUNDERING AGENTS AND HARD WATER IN WASHING. Sigurd Kohler. *Tek. Tid. 70,* No. 38, Uppl. A, 365-8 (1940). The insol. film deposited on textiles when hard water is used is definitely deleterious to the textile, more so if the fatty acids have double bonds in that the oxidation of these in sunlight drying also oxidizes the fiber decreasing its tensile strength. *(Chem. Abs.)*

ANALYSIS OF WASHING POWDERS CONTAINING SULFATES AND SULFONATES. S. Ram. *Analyst 67,* 162 (1942). Shampoo and other washing powders contg. alkali sulfates together with a sulfate or a higher alc. of a sulfonate of a fixed oil cannot be analyzed satisfactorily by the methods in Allen's Commercial Organic Analysis. Satisfactory results can be obtained as follows: Ash the powder with excess Na_2CO_3 and det. the SO_4 in the aq. soln. with 2-5 ml. of satd. brine free from sulfate, decant filter and repeat the process 5 times. Rinse the mortar and pestle with brine and wash the filter. Make up to a definite vol. mix and det. the alkali sulfate. The difference between the 2 results shows S present as alkyl sulfate or as sulfonated oil. *(Chem. Abs.)*

THE BEHAVIOR OF SOLUTIONS OF SODIUM SOAPS AT THE INTERFACE OF PARAFFIN OIL AND WATER. Raymond Cavier. *Compt. rend. 213,* 70-1 (1941). The interfacial tension of oil and water is reduced by the soaps. The reduction increases with the no. of double bonds in the fat acid part of the soap. Na dibromoricinoleate is more surface active than Na ricinoleate, and alphabromolaurate is more surface active than the laurate. The activity of Na ricinoleate is equal to that of the oleate. The soaps derived from chaulmoogra oil, and particularly Na hydnocarpate, affect the interfacial tension more than the surface tension. *(Chem. Abs.)*

DIFFUSION OF SEVERAL SOAPS IN SALT-CONTAINING MEDIA. O. Lamm. *Kolloid Z. 98,* 45-52 (1942). The concn. function of the diffusion coeff. of the K soaps of caprylic, capric and lauric acids was detd. from diffusion measurements made according to the concn. differential. A diffusion vessel with a glass filter disk and air seal is described. The const. region of the diffusion-concn. curve indicates a characteristic formation stage of micelles which with increasing length of C-chain moves rapidly toward lower concns. and is affected by the addn. of salt. The region of transformation for laurate in a salt-free medium is approx. 0.025 N. In a salt-contg. medium (0.1 N KOH and 1 N KCl) the formation of the micelles is complete at 0.005 N. With the caprate the value in a salt-free medium (0.11 N) changes to 0.02 N in the 0.1 N KOH and 1 N KCl. The coeff. of diffusion for the caprylate is const. at 0.3 N in the salt-contg. medium. At concns. greater than those specified no dependence of concn. on coeff. of diffusion was observed. For the K soaps at 20° the coeffs. of diffusion in 0.1 N KOH and I N KCl are as follows: laurate 10.0, caprate 12.2, caprylate 17.1, myristate 1.23, times 10^{-7} c.g.s. in 0.005-0.15 N soln. *(Chem. Abs.)*

PATENTS

SOAP AND LUBRICANT CONTAINING THE SAME. Reuben A. Swenson (Standard Oil Co.). *U. S. 2,295,189.* The process comprises reacting litharge and fish oil and then reacting the product so obtained with NaOH at a sufficiently elevated temp. to substantially eliminate any water present in the final product whereby a complex sodium lead fish oil soap is produced.

LUBRICANT. C. M. Grafton (U. S. Rubber Co.). *U. S. 2,299,139.* A rubber to metal high viscosity lubricant comprises a triethanolamine soap as the major non-aq. ingredient in admixt. with starch present in amt. sufficient to form a substantially non-flowing aq. soln. with said soap.

SOAP STOCK PURIFICATION AND PRODUCT. B. H. Thurman (Refining, Inc.). *U. S. 2,299,603.* A high quality soap product contg. at least 40% of purified soap stock prepd. from soap stock obtained from the alkali refining of vegetable oil consists essentially of soap and substantial amts. of other detergent compds. resulting from the thermal decompn. of materials including proteinaceous material originally present in the soap stock and being substantially free of odorous and decomposable proteinaceous material.

HARD-WATER SOAP. Robert B. Colgate. *U. S. 2,294,075.* Hard-water soap contg. tetraphosphates, pyrophosphates or metaphosphates together with a mineral oil sulfonate.

GERMICIDAL SOAP. A. James Smith. *U. S. 2,296,121.* Germicidal soap contg. Chloramine-T, Chloramine-B or D-choleramine-T. Various compns., exp. cream soaps are described.