water, 0.001–3% of an alkali metal permanganate (sodium or potassium) or mixtures thereof, 0–2% of a synthetic organic detergent (anionic or nonionic), and 0.01–5.0% of a polyaminopolycarboxylic acid sequestering agent selected from the group consisting of the alkali metal salts of diethylenetriamine pentaacetic acid, ethylenediamine tetraacetic acid, propylene 1,2-diamine tetraacetic acid, propylene 1,3-diamine tetraacetic acid, 1,4-butylene diamine tetraacetic acid, and dipropylene 1,2-triamine pentaacetic acid.

HIGH MOLECULAR WEIGHT FATTY ACID AMIDO SURFACTANT AND PREPARATION THEREOF. J. Katz. *U.S. 3,262,951.* The surfactant N-lauramido-ethyl-N-hydroxyethyl-N'-sodium propionate is claimed.

DETERGENT COMPOSITION. J. T. Inamorato (Colgate-Palmolive Co.). *U.S. 3,265,264.* A controlled sudsing, heavy-duty detergent composition consists of: (a) from 7.5–40% by weight of a water-soluble, anionic organic detergent selected from the group consisting of alkali metal sulfates, sulfonates and carboxylates having in their molecular structure an alkyl group of 8–22 carbon atoms; (b) 25–60% of a water-soluble, alkali metal inorganic phosphate builder salt; and (c) 2–30% of a mixture containing 1–67% of a quaternary ammonium salt having the formula $[N(R_1R_2R_3R_4)]X$ in which R_1 is an alkyl group of 10–20 carbon atoms, R_2 and R_3 are alkyl groups of 1 to 3 carbon atoms each, R_4 is an alkyl group of 1–3 carbons or a benzyl group, and X is chlorine and bromine, and from 33–99% of a bleach selected from the group consisting of trichlorocyanuric or dichlorocyanuric acid and sodium or potassium dichloroisocyanurate.

LIQUID DETERGENT. E. Grob (C. P. Baker & Co.). *U.S. 3,265,625.* A substantially clear, homogeneous liquid detergent consists of 5–15% by weight of an alkylphenol-ethylene oxide condensate having 6–20 ethoxy groups per mole of phenol and the alkyl group having 8–9 carbon atoms, 1–10% of a long chain alcohol-ethylene oxide condensate having 5–20 ethoxy groups per mole of alcohol esterified with phosphoric acid, the long chain alcohol being selected from the group consisting of tridecyl alcohol and alkyl phenols having 8–20 carbon atoms in the alkyl group, 2–8% of a fatty acid-alkanolamine condensate, the fatty acid acid having 12–16 carbon atoms and the alkanolamine being selected from the group consisting of ethanolamine, diethanolamine and propanolamine, 4–15% of an alkali metal salt of an aminopolyacetic acid selected from the group consisting of nitrilotriacetic, ethylened nine tetraacetic, hydroxyethyl ethyldiamine triacetic, and thylenetriamine pentaacetic acid, and the remainder water.

DETERMINATION OF CATIONIC SURFACTANTS SUCH AS AMINES, POLYAMINES AND QUATERNARY AMMONIUM SALTS BY CHROMATOGRAPHY. I. GAS-LIQUID CHROMATOGRAPHY. K. Kourovtzeff (Lab. of Anal. Res. d'Auby, Fr.). *Rev. Franc. Corps Gras* **13**, 271–276 (1966). By use of various chromatographic methods, it is possible to resolve some problems involved in analyzing mixtures of fatty amines or their surfactant derivatives, especially in the determination of chemical nature, of major constituents and the study of the nature of higher fatty chains. Good results are obtained with GLC using a column prepared with glass beads pretreated with KOH. Using Apiezon N one can separate amines and unsaturated polyamines. If an oxyethylated amine is used as the stationary phase, pretreatment is not necessary.

PROCESS FOR RECOVERING UNREACTED SUCROSE FROM REACTION SOLUTION OF FATTY ACID SUCROSE ESTER. S. Mori (Dainippon Seito Kabushiki Kaisha, Tokyo). *U.S. 3,231,562.* Described is a process for the recovery of sucrose from a reaction solution containing sucrose ester, free sucrose, an alkaline catalyst and a solvent prepared by the reaction of sucrose with methyl-fatty acid esters containing 6–30 carbon atoms in the fatty acid moiety in the presence of a catalyst in dimethylformamide, at a temperature of 60–120C in a vacuum while, with the progression of the reaction, distilling out the methyl alcohol and dimethylformamide. The improvement comprises mixing the reaction solution with toluene in a quantity from between 20–95% by weight based on the resulting DMF-toluene mixed solvent at a temperature of 80–85C, the amount of toluene being sufficient to render the sucrose substantially insoluble in the reaction solution, while at the same time sufficient to dissolve a substantial amount of sucrose ester, thus causing crystallization of the sucrose, cooling the mixture to about 30C and separating the sucrose from the mixture by ordinary separation methods.

(Continued on page 486A)

Ozone Research & Equipment Corp.
Ozone Testing, Research, Consulation
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Paint Technologists Plan Meeting in Washington

The Baltimore Society of the Federation of Societies for Paint Technology will be host to the 44th Annual Meeting, Nov. 2–5, 1966.

Keynote address will be delivered by J. A. Hager, President of the National Paint, Varnish and Lacquer Association. The Mattiello Lecture, "Poly (Xylenol), a Major New Candidate for Surface Coatings," will be delivered by C. C. Price, of the University of Pennsylvania.

Papers to be presented have been divided into 6 classifications: Research and Development, Management and Communications, Production Planning and Control, Engineering and Design, Testing and Quality Control, and Product Performance.

Seven workshops have been scheduled; Inventory Production Control, Safety Program, Process Control Instrumentation, High Speed Dispersion, Filtering and Straining, Quality Control, and Quality Control Problem Clinic.

Running concurrently with the Annual Meeting will be the 31st Annual Paint Industries' Show, which will be open to all those who are registered for the convention.

Fellows of AOAC Honored

Sixteen scientists and administrators who have been named Fellows of the AOAC were honored during ceremonies at the 80th Annual Meeting of the Association of Official Anaytical Chemists, Marriott Motor Hotel, Twin Bridges, Washington, D. C., Oct. 10–13, 1966.

Those considered for the award have performed major service as Officer, Referee, Associate Referee, and Committeeman, for a period of 10 years or more.

The Association honored the following who were named in 1965 and 1966:

1965 Fellows: J. H. Jones, P. S. Jorgenson, Henry Loy (deceased), L. H. McRoberts, Mrs. M. S. Oakley, M. J. Pro, F. C. Sinton (deceased), and L. S. Stuart.

1966 Fellows: J. W. Cook, L. G. Ensminger, K. L. Harris, G. E. Keppel, A. K. Klein, L. L. Ramsey, S. B. Randle, and C. R. Szalkowski.

• *New Literature*

The Chemical Engineering Catalog, 51st Edition, 1967, is now available from Reinhold Publishing Corporation. A complete guide to the process industries, it contains a Company catalog index, functional guide, equipment and materials of construction index, engineering services index, and trade names index, as well as an insert catalogue section and a run of book catalog section. (430 Park Avenue, New York, N. Y. 10022.)

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