ABSTRACTS: DETERGENTS

(Continued from page 43A)

Novel Gel emulsions. T. G. Kaufman and R. J. Tkaczuk (Drew Chem. Corp.). U.S.~3,341,465. A clear gel emulsion consists essentially of 10-40% by wt. of at least one ester having the following general formula: R_1COOR_2 , where R_1 is a C_8-C_{24} fatty acid residue and R_2 is a C_1-C_4 lower alkyl radical; 20-80% water; 3-15% of at least one alkylolamide having the general formula: $R_5CONR_4R_5$, where R_3 is a C_8-C_{14} fatty acid residue, R_4 is either hydrogen or a C_1-C_4 monohydric alkyl radical and R_5 is a C_1-C_4 monohydric alkyl radical; 1-25% of a polyoxyethylene surfactant having one of the two following general formulas: $R_5O(C_2H_4O)_nH$ and $R_6COO(C_2H_4O)_nH$, where R_6 is a C_8-C_{24} aliphatic radical and n is an integer between 2 and 40; and 1-8% of a partial oleic acid ester of a polyglycerol.

DETERGENT COMPOSITION. G. G. Corey and E. J. Kennedy (Colgate-Palmolive Co.). U.S. 3,342,739. A clear hard surface cleaning composition characterized by high flash foam during dilution and low residual foam at use concentration consists essentially of about one part of a polyethenoxy nonionic detergent, 0.4–3.0 parts of an ethoxylated fatty acid alkylolamide condensate with 10–14 C atoms in the acyl group and 0.05–0.3 parts of C₁₀–C₁₄ fatty acids, and the remainder water. This mixture of ingredients, having a pH of 6.9–7.5, forms a clear solution with a viscosity between 125 and 1,000 centipoises.

WINDOW CLEANER. J. E. Kazmierczak, A. B. Herrick and A. Carlo (Armour & Co.). U.S. 3,342,740. A window cleaner composition consists essentially of 0.1 to 2.5% by wt. of a water soluble silicone glycol copolymer, 10-30% of a C₁ to C₄ alcoholic solvent, 0.1-0.5% of a nonionic surfactant, and the rest water.

THIOETHER SULFONATES. E. P. Antoniades (Chevron Research Co.). U.S.~3,342,741. A detergent composition is claimed, consisting essentially of 10 to 40%, by wt., of a water soluble guanidinium 2-thioalkoxyethanesulfonate having 8–20 C atoms in the alkyl groups, and 60-90% of water soluble inorganic detergency builders.

PROCESS FOR PREPARING DETERGENT TABLETS. E. D. Wilcox, Jr. (Lever Bros. Co.). U.S. 3,344,076. An improvement is claimed in the process of preparing strong, abrasion-resistant, fast dissolving, low sudsing detergent tablets by blending together a mixture of (1) 4–13% by wt. of a synthetic nonionic detergent, and (2) 20–95% of a mixture of Form I and Form II pentasodium tripolyphosphate, and compressing the resulting granular mixture into tablets. The improvement claimed consists in chilling the compressed tablets to 10–45F for a period of 5 to 20 minutes to accelerate their strengthening.

Organic Phosphorus compounds. R. R. Irani and K. Moedritzer (Monsanto Co.). U.S. 3,344,077. A detergent composition is described, consisting of at least 5% of a water soluble inorganic alkaline builder or of an organic sequestering builder, and at least 10% of an organo-amine-di-alkylene phosphorus compound having the formula (XO)₂POCR₂R₂NRCR₃R₄ PO(OX)₂, where R is selected from a group consisting of C₄-C₅₀ aliphatic hydrocarbyl groups, C₇-C₆ alicyclic groups, C₆-C₁₀ aryl groups, C₇-C₅₀ alkaryl groups, C₇-C₅₀ aralkyl groups; R₁, R₂, R₂ and R₄ are selected from the class consisting of hydrogen, C₇-C₅₀ aliphatic hydrocarbyl groups, C₇-C₅₀ aliphatic groups, C₇-C₅₀ alkaryl groups and C₇-C₅₀ aralkyl groups; and X is selected from the group consisting of hydrogen, alkali metal, alkaline earth metal, ammonium and lower molecular weight alkyl, alkylene and alkanol amines.

COATING COMPOSITIONS COMPRISING ALKYLOLATED ACRYLAMIDE-ETHER VINYL MONOMER-DRYING OIL INTERPOLYMER. H. H. Flegenheimer (Celanese Coatings Co.). U.S. 3,344,097. A coating composition consists of an interpolymer of (1) an N-alkoxymethyl acrylamide having less than 10 C atoms in its alkoxy portion, (2) 5-60% by wt. of a material selected from the group consisting of natural drying and semidrying oils, reaction product of dehydrated castor oil and pentaerythritol, linseed fatty acid ester of pentaerythritol, cyclopentadiene modified linseed oil and styrenated natural drying oil, and (3) at least one other vinyl monomer copolymerizable with (1) and (2).

Drycleaning process in which garments are initially contacted with an organic solvent-water-detergent concentrate. J. M. Chisholm (Emery Industries, Inc.). U.S. 3,845,123. An improvement is claimed in a dry cleaning process employing a mixture of organic solvent, oil-soluble

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25th Anniversary of Hormel Institute

Minnesota Univ. President Moos Addresses Group

The 25th anniversary of The Hormel Institute was celebrated on Nov. 8, 1967, with a luncheon at the Austin Country Club, Austin, Minn. Invited guests included Malcolm Moos, President of the University of Minnesota, and other University officials, former and present members of the Board of The Hormel Institute, various state, county, and city officials, and past and present employees of the Institute.

Following the luncheon, President Moos addressed the guests, speaking on "College Demonstrations Throughout the Nation."

Before the official celebration, W. O. Lundberg, Director of The Hormel Institute, R. T. Holman, and Herman Schlenk, senior staff members, appeared on the KAUS-TV program "Focal Point," and discussed various areas of research activities at the Institute. A question-and-answer period followed, with questions being telephoned in by people residing in the local area.

people residing in the local area.

On Sunday, November 12, an open house was held at the Institute laboratories for the general public.

Beta-Amines . . .

(Continued from page 12A)

As for petroleum applications, increased hydrocarbon solubility, plus a high level of bactericidal activity toward anaerobic, corrosion-producing sulfate reducing organisms makes possible more efficient handling, storage and all-weather use in oil production usage. Excellent fuel oil additives, combining dehazing, corrosion inhibition and dispersancy, have been formulated; and chemicals which very effectively settle particulate matter from hydrocarbon systems have been developed.

Very promising anticaking formulations for hygroscopic particles, showing more even coating and easier application and better spreading characteristics, are now available. This is particularly true for mixed fertilizers, urea and ammonium sulfate.

Effective salts of the herbicidal acids, with low viscosities and pour points and high oil solubility have been prepared. Nonvolatility and low water loss are a characteristic of these. Invert emulsions for agricultural sprays have been readily prepared also.

Sound deadener formulations based on beta chemicals allow the preparation of coatings with good adhesion, even filler distribution and smooth, void-free films.

Excellent vapor-phase inhibitors, for protection in gas transmission lines and storage tanks, can be formulated.

In situ-prepared gelation systems for various polar and nonpolar solvents for a variety of uses are possible.

Toxicity data on these products are available and are in the same range of activity as the *alpha* amines, in terms of LD_{50} and skin and eye irritation levels.

Additional applications have been developed but are not yet available for publication because of patent filings. Process and product applications are also pending.

A large pilot plant installation, capable of producing all product lines in field development quantities is in full operation. Full plant capability should be available in about two years.

The February JAOCS will carry the AOCS abstracts for the AOCS-AACC Joint Meeting in Washington, March 31-April 4. A complete listing of titles and authors was published in the December 1967 issue.