

## Staley sells

Staley, a subsidiary of Tate & Lyle PLC, has sold its Horizon Chemical Division's alkyl polyglycoside (APG) surfactant business to Henkel Corp., the U.S. subsidiary of Henkel KGaA of West Germany.

Under the agreement reached between the two companies, Staley was to transfer all assets of the APG surfactant business to Henkel by July 15, 1988.

APG is a line of anionic surfactants with starch as the water-soluble group. Full-scale production of the surfactant line has not begun yet. However, there is a demonstration-scale plant in Crosby, Texas, that produces several million pounds of the material a year.

## Oil-field demand

Demand for polymers and organic specialties, such as surfactants, for use as oil-field chemicals in the U.S. will grow 2.5% annually, to reach 6.2 billion pounds by 1992, according to an industry study from The Freedonia Group Inc. of Cleveland, Ohio.

Enhanced oil recovery (EOR) will offer good opportunities for oil-field chemicals through 1992, the report said, noting that EOR will become increasingly attractive as oil prices increase. The report said the success of chemical EOR will depend on the development of new chemicals and technology.

For more information on the 82-page report, contact The Freedonia Group Inc., 2940 Noble Rd., Suite 200, Cleveland, OH 44121.

## P&G venture

Following three years of negotiations, Procter & Gamble Co. (P&G) and Hutchison Whampoa Ltd. of Hong Kong have reached an agreement with Guangzhou Soap Factory and the Guangzhou Economic & Technological Development District's Import & Export Corp. to form a joint venture in Guangzhou, a large city in southern China.

## Unichema project

An expansion project is nearing completion at Unichema Chemicals' headquarters plant in Chicago, Illinois. The three-phase plant expansion and modernization project, begun in 1985, will virtually double the company's total production capacity at the 25-acre site.

The first phase, completed in late 1987, doubled Unichema's distillation and hydrogenation capacity. In the second phase, separation capacity by the first quarter of 1988 was boosted by two-thirds. By the third quarter of 1988, capacity for splitting tallow into fatty acids and glycerine was to increase by an additional 50%. The end result will be a doubling of annual production.

"To accomplish this increased output capacity, we have made vast improvements in computerized controls, increased the degree of instrumentation in the facility, and brought our plant technology up-to-date," according to Prot Dammertz, Unichema's technical vice president.

In other news, Unichema has opened an eastern regional sales office in Manalapan, New Jersey. The office serves customers in 15 states. The office will handle sales of company products produced domestically at the Chicago facility as well as imported products. Jack Trubiano, eastern regional sales manager, will head the office.

Meanwhile, Brian Schaughnessy has been named marketing manager for Unichema Chemical's ester and glycerine product lines. He joined the company from Unichema Ltd.

Procter & Gamble (Guangzhou) Ltd., the joint venture company formed, is scheduled to begin manufacturing personal care products by October 1988. The initial products will include shampoo, bath foam and light-duty dishwashing detergents.

In other actions, P&G has elected Charles C. Carroll vice president of business development, health and beauty care. Bengt E. Braun, general manager of the dishwashing products, packaged soap and detergent division, has been appointed to succeed Carroll as manager of the bar soap and household cleaning products division.

## Bleach outlook

Use of bleach chemicals in North America is forecast to grow from 6.6 billion pounds to 10 billion pounds between 1986 and the year 2000, according to Colin A. Houston & Associates.

In a report entitled "Household and Industrial Bleach Systems—North America Forecast to 2000,"

the Mararoneck, New York, consulting firm predicted some end markets will experience 20% average annual growth.

Use of oxygen-based bleaches is forecast to grow twice as fast as that of chlorine-based bleaches. In 1986, oxygen-based bleaches represented 8% of the total within the 22 end markets surveyed and are expected to increase their share to almost 11%. Chlorine-based bleaches will experience varied results, although most are expected to grow at least 2% per year.

Use of bleach chemicals in laundry detergents is forecast to grow more than 20% per year. Auxiliary bleaches will decline in tonnage, but will increase slightly in the number of bleached loads of wash as more concentrated products are used. The market for detergents with bleach will grow substantially between now and 1995, the study predicted. Between 1990 and the year 2000, bleach activators, such as acyloxybenzene sulfonates and tetraacetyl ethylenediamine, are forecast to grow over 11% per year.

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The report noted the pulp and paper industry is the biggest user, consuming almost 6 billion pounds in 1986. Other bleach chemical applications include textiles, industrial and institutional cleaning and sanitizing, pools and spas, wood, food and chemicals.

## Keeping tidy

The latest washday miracles to secure strongholds in the competitive household cleaning market will be convenient and compatible with the environment, according to a Frost & Sullivan report.

The 265-page study, "Household Chemicals Market in the U.S.," examines four major household cleaning categories—surfactants, builders, enzymes, and bleaches—comprising over 80% of today's household cleaner volume.

The study notes that on a pound-volume basis, product volume will grow slowly, from 4.2 billion pounds in 1986 to 4.6 billion pounds by 1992. That averages out to a 1.5% annual growth rate. Despite the slow growth, technological changes are being developed to meet consumers' demands for convenient, time-saving products that also are environmentally safe.

Work under way includes developments with enzymes to find one effective against fatty stains; use of builder assists (polymeric products) to act as water hardness sequestrants and dispersants; use of detergent assists (quaternary ammonium compounds); achieving compatibility of ingredients in liquid laundry detergents; the performance of large volume surfactants in hard water; the continuing issue of biodegradability concerning alkylphenol ethoxylates; development of narrow-range ethoxylates and the formulating flexibility they are expected to provide for laundry detergents; and use of sodium tripolyphosphate due to environmental issues.

The study also notes the growth of liquid laundry detergents, because of their convenience and acceptance in phosphate-restricted areas, will boost surfactant growth by 2.7% per year.

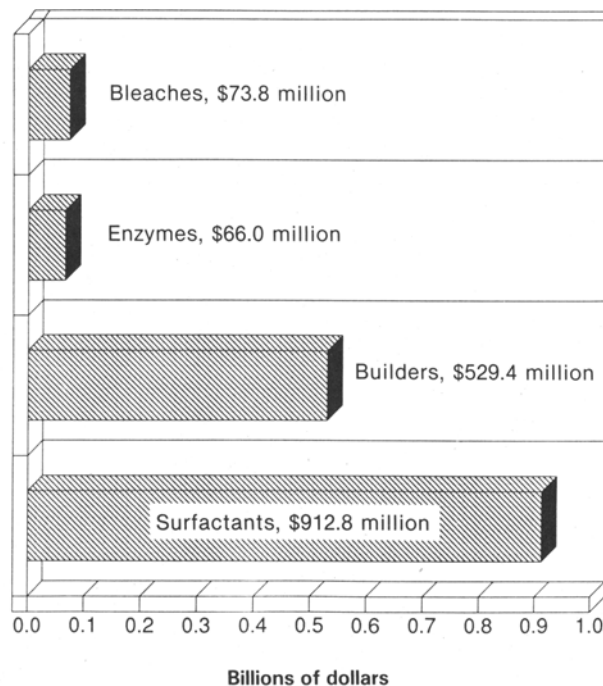


FIG. 1. U.S. Market for household chemicals—1988. Source: Frost & Sullivan Inc.'s Report #A1815.

The report also forecasts the growth of specific chemical products used in the four major categories. Surfactants represent the largest category in dollar volume, at \$912.8 million in 1988 (Fig. 1), and second largest in volume, at 1.67 billion pounds. Linear alkylbenzene-sulfonates, the largest volume surfactants, are projected to increase 7.5% per year in usage in laundry liquids, but will decline 1.3% per year in laundry powder use because powder use will decline.

Frost & Sullivan also predicts alcohol ethoxylates will be the largest growth surfactant, while alcohol sulfates will suffer the largest decline.

The report notes that if lipases can be developed to remove fats, the enzyme category is expected to grow by 5.8% per year. The challenge for bleach manufacturers, meanwhile, is the successful incorporation of their products into laundry liquids.

## Computer wash

A Japanese company has designed a computerized washing machine that automatically selects the amount of laundry detergent for every load and selects the proper water level, according to a report in the *Asian Wall Street Journal*.

The report claims that the machine, offered by Matsushita Electric Industrial, also dissolves an enzyme into the detergent to improve cleaning power. The machine can be set to turn itself on at a

predetermined time and to wash up to nine pounds of laundry at a time. The unit is equipped with a soap dispenser holding up to 78 ounces of soap.

## News briefs

John Luvisi has been named general manager of Hodag Chemical Corp.

Lawrence B. Moss has been named product manager for industrial sur-

## Surfactants & Detergents News

factants in the organics division of **Witco Corp.** Also, **Michael A. Scarletelli** has been named manager of distributor sales for the organics division.

The Danish subsidiary of **Colgate-Palmolive** is acquiring the bleach business of **Klorin Group**, producer of Denmark's leading brand.

**Inolex Chemical Co.** has formed a business unit, **The Inolex Group**,

to pursue long-range expansion and development. **Michael E. Echols**, president of **Inolex Chemical Co.**, will be president of **The Inolex Group**.

**Sanyo Chemical Industry of Japan** and **Rohm & Haas** of the U.S. have reached an agreement on lubricant additives. Sanyo is to provide technology and sales rights to **Rohm & Haas**, which will designate Sanyo as its representative

for lubricant additives in such countries as Australia and Korea.

**ICI Paints** has licensed its "Aquabase" waterborne basecoat technology to **Nippon Oils and Fats** and **Shinto** in Japan.

**Ronald H. Gordon** has been appointed account executive of aroma chemicals for **Quantum Chemical Corp.'s Emery Division**.

## Surfactants & Detergents Calendar

### 1988

#### October

Diploma Course in Cosmetic Science, Oct. 3, 1988, The Polytechnic of Central London, London, England. Contact: General Secretary, Society of Cosmetic Scientists, Delaport House, 57 Guildford St., Luton LU1 2NL, England.

17th Introductory Short Course on Paint Formulation, Oct. 3-7, 1988, University of Missouri-Rolla, Rolla, Missouri. Contact: Coatings and Polymer Science Program, Department of Chemistry, University of Missouri-Rolla, 142 Schrenk Hall, Rolla, MO 65401-0249.

Canadian Manufacturers of Chemical Specialties (CMCS) annual meeting, Oct. 23-25, 1988, Park Plaza Hotel, Toronto, Ontario, Canada. For information, telephone 613-232-6616.

Cosmetic, Toiletry and Fragrance Association scientific conference, Oct. 23-26, 1988, Showboat Hotel, Atlantic City, New Jersey. For information, telephone 202-331-1770.

Introduction to Polymer Chemistry Short Course, Oct. 31-Nov. 4, 1988, University of Missouri-Rolla, Rolla, Missouri. Contact: Coatings and Polymer Science Program, Department of Chemistry, University of Missouri-Rolla, 142 Schrenk Hall, Rolla, MO 65401-0249.

#### December

Society of Cosmetic Chemists annual meeting, Dec. 1-2, 1988, Waldorf-Astoria, New York, New York. For information, telephone 212-874-0600.

Chemical Specialties Manufacturers Association 75th annual meeting, Dec. 4-8, 1988, Marriott Har-

bor Beach Resort, Ft. Lauderdale, Florida. For information, telephone 202-872-8110.

### 1989

#### January

62nd Annual Meeting and Industry Convention, The Soap and Detergent Association (SDA), Jan. 26-29, 1989, Boca Raton Hotel, Boca Raton, Florida. Contact: SDA, 475 Park Ave. S., New York, NY 10016.

#### March

XX Meeting of CED/AID on Surfactants, March 8-10, 1989, Hotel Princesa Soffa, Barcelona, Spain. Contact: Secretaria de la Asociación de Investigación de Detergentes (AID), Jorge Girona Salgado, 18-26, 08034 Barcelona, Spain.

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