

Mailing address: Novo Industri A/S, Enzymes Division, Novo Alle, 2880 Bagsvaerd, Denmark.

**Ralston Purina** (Booths 30, 31, 32 and 33). Mailing address: Ralston Purina Co., Checkerboard Square, St. Louis, MO 63188, USA.

**Rhone Poulenc** (Booth 42) produces textured vegetable proteins characterized by excellent nutritional value and a meat- or fish-like texture appearance. They permit production of low-cost, all-vegetable foods. Different flavors are available. Dried or deep-freeze cubes can be supplied. Rhone-Poulenc also will be displaying their purification process for vegetable proteins (alfalfa, rapeseed, soybean) by adsorption on Spherosil R selective adsorbent which provides high purity and quality proteins. Mailing address: Rhone Poulenc Chimie Fine, 21 Rue Jean-Goujon, F-75360 Paris Cedex 08, France.

**A.E. Staley Mfg. Co.** (Booths 40 and 41) of Decatur, Illinois, USA, was the first commercial processor of soybeans in the United States. Today the Staley Company offers a complete line of food grade soy flours, textured soy flours, soy grits, soy protein concentrates, textured soy protein concentrate, enzyme-modified soy proteins, and hydrolyzed vegetable proteins. Typical European and English sausages and American ground beef products, as well as various confectionary products, utilizing soy protein will be available for tasting at the Staley booths. Mailing address: A.E. Staley Mfg. Co., P.O. Box 151, Decatur, IL 62525, USA.

**Tecator AB** (Booth 17). Mailing address: Tecator AB, Kronborgsgatan 6, Box 308, S-251 04 Helsingborg, Sweden.

**Technicon Corporation** (Booth 35) is a leader in the development, manufacture, and marketing of automated instruments and systems for blood and serum analyses, as well as the analysis of foods, pharmaceuticals, water pollutants, cereals and grains, and other industrial products. With headquarters in Tarrytown, New York, USA, Technicon has a worldwide staff of more than 4,000 persons in 48 locations for manufacturing, sales, service, and distribution in 23 countries. Technicon's Industrial Division developed the InfraAnalyzer, a high speed, automatic infrared reflectance analyzer for agricultural products. The InfraAnalyzer analyzes these products not only for the protein and oil (fat) content, but also for moisture and other parameters. Technicon works closely with U.S. government agencies to develop specialized testing programs and has, in recent years, developed its Differential Integrating Spectrophotometer Computer (DISC) for basic research. Several new applications have been developed during the past year, including analysis systems for pet food manufacturers. Mailing address: Technicon Instruments B.V., Prins Hendrikkade 13, 3071 KB Rotterdam, The Netherlands.

**Tintometer GmbH** (Booth 50) and "Lovibond" are names long associated with the oil and fats industry, not only as manufacturers of the Lovibond Tintometer Color Measuring Instrument, but as manufacturers of color scales and instruments used extensively throughout the industry. The exhibit will feature the Tintometer conforming to AOCS specification Cc 13b-45 (1962); the Gardner Scale confirming to AOCS specification Td 1a-64-KA 3-63 DIN 6161 and ASTM D-1544-68; and the FAC Scale in accordance with AOCS specification Cc 13a-64. Also featured will be the Lovibond Automatic Tintometer, capable of measuring refined vegetable oils within seconds, producing an objective red and yellow reading matching up with those obtained on the regular Lovibond Tintometer. Mailing

address: Tintometer U.S.A., P.O. Box 17, Bloomingdale, NJ 07403, USA.

**UniMills Zwijndrecht, Holland** (Booths 45, 46, 47, 48), is a part of Unilever with years of experience in the field of soy protein. Its activities cover Europe and expanding markets throughout the world. The blandness and functionality of UniMills concentrates (flour and textured) and isolates open broad and additional applications with good consumer acceptance. The World Conference on Vegetable Food Proteins in Amsterdam is the platform to demonstrate those results. An exchange of UniMills extensive know-how and research covering soy nutrition, health, and marketing aspects will be possible during the exhibition hours. UniMills invites all conference members for discussions at its booth. Mailing address: UniMills B.V., Lindtsedijk 8, Zwijndrecht, The Netherlands.

**Wenger Manufacturing** of Sabetha, Kansas, USA, and its export division, **Wenger International, Inc.** (Booths 18 and 19) will display textured soy meat extenders and meat analogs produced by its extrusion cooking system. A film presentation will explain the principles of extrusion cooking, control of process variables, need for sanitation and its effect on off flavors in textured protein foods. The slide presentation will include electromicroscopic views which illustrate the structure of vegetable proteins as they are produced as meat extenders. Wenger will describe its Uni-Tex process for production of meat analogs that bear an uncanny resemblance to the appearance, structure, mouthfeel, and mastication characteristics of meat. Mailing address: Wenger International, Inc., Franklin Rooseveltplaats 12, B-2000 Antwerpen, Belgium.

**Westfalia Separator** (Booth 26). Mailing address: Westfalia Separator, Werner-Habig-Strasse, D-4740 Oelde 1, West Germany.

## from Washington



U.S. vegetable protein producers had mixed initial reactions to FDA's proposed final regulations. The "tentative final regulation" was published July 14, 1978, with a tentative effective date of July 1, 1979.

The rules establish nomenclature for vegetable protein products and nutritional requirements for vegetable protein products designed to substitute for and to resemble traditional protein-rich foods.

Basic vegetable protein material containing less than 65% protein may be identified as a "flour." A soy-based product in this category would be "soy flour" with an alternative name based on description of its physical characteristics, i.e., "soy granules" or "soy bits." A producer would have the option of combining the two alternatives, "soy flour granules." The term "protein" could not be used in the name of these products.

Basic products of 65 to 90% protein would be described as "protein concentrates," with the source specified: "soy protein concentrates," or, with an optional physical descriptive term, "soy protein concentrate bits."

Basic products with 90% or more protein would be termed "protein isolates," with the source specified: "soy protein isolate" or "isolated soy protein." Physical descriptive terms such as bits and granules would again be optional for this class of products.

(Continued on page 729A)

From Washington (Continued from page 724A)

Mixtures of two or more of the basic products could be labeled "vegetable protein product," or "plant protein product" with specific ingredients identified in the mandatory ingredient statement on the package.

Consumer-oriented products designed to resemble and to substitute for meat, seafood, poultry, eggs, or cheese must match one of six nutritional profiles developed by FDA for specific types of products. Products failing to match the FDA profiles would have to be labeled "imitation." Products meeting nutritional profiles would be labeled "vegetable (plant) protein product," with optional addition of "textured" or "texturized" as well as a physical description term.

Thus an artificially flavored product that is a substitute for ham could be identified as "artificially ham-flavored vegetable protein product," the FDA said.

Products made up of traditional foods and vegetable proteins also are covered. A fish chowder in which vegetable protein substitutes completely for the fish could be labeled "chowder made with artificially fish-flavored vegetable protein product," the FDA said. A macaroni-and-cheese-type product in which vegetable proteins are partially substituted for cheese could be termed, "macaroni casserole, made with cheese and vegetable protein product." Specific types of vegetable protein used would be listed in the ingredient declaration.

The nutritional profiles spell out vitamin and mineral requirements in each of six product categories. FDA said it was "immaterial" whether these ingredients are added by the vegetable protein manufacturer or the final food fabricator, as long as the consumer product meets the profiles. If final food fabricators add the ingredients, the protein producers will have fewer products to make, label, and keep in inventory. If final guidelines say producers have to add the vitamins and minerals, it will mean a sixfold increase in number of products handled.

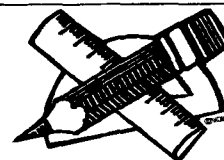
Details: *Federal Register*, Friday, July 14, 1978, pp. 30471-30491.

The Interagency Testing Committee of the Environmental Protection Agency published its final rules on health and safety study reporting regulations on July 18, 1978. The list of substances covered remains the same as proposed, but there have been some changes in definitions of terms and some changes in scope of the regulation. For example, the types of studies required to be reported now include all studies of any toxicities, not just the five categories originally specified. To cut down on duplicate submissions, the regulation now says manufacturers, processors, or distributors only need to submit reports done by or for them for substances actually manufactured, processed, or distributed by them. Studies already submitted to federal agencies or indexed in specified abstract services need not be submitted. The new regulation took effect Aug. 17, 1978. Details: *Federal Register*, Tuesday, July 18, 1978, p. 30984.

The EPA has published final rules for tolerances in food and on raw agricultural commodities for the insecticide O-ethyl O-(4-(methylthio)phenyl) S-propyl phosphorodithioate. The rule sets a tolerance of one part per million in cottonseed oil and cottonseed hulls, 0.5 part per million in raw cottonseed; 0.01 part per million on meat, fat, and meat by-products of cattle, goats, hogs, horses, poultry, and sheep; and 0.001 parts per million in eggs and milk. Details: *Federal Register*, Tuesday, July 25, 1978, pp. 32129, 32133.

The FDA has proposed removing gum guaiac from the list of direct human food ingredients that are considered safe. The FDA said it has not been able to find any evidence that the substance, at one time used in edible fats and oils as a preservative, is now being used in food products. Comments on the proposal will be accepted until Sept. 26, 1978. Details: *Federal Register*, Friday, July 28, 1978, p. 32819. The proposal would not affect the substance's use as an antioxidant in food packaging materials or in resinous and polymeric coatings.

# Abstracts



EDITOR: S. KORITALA • ABSTRACTORS: J.C. Harris, M.G. Kokatnur, F.A. Kummerow, G. List, B. Matijasevic, K.D. Mukherjee, D.B.S. Min, R.A. Reiners, and P.Y. Vigneron

## • Drying Oils and Paints

TUNG OIL SUBSTITUTE FOR PRINTING INK. O. Nitidandhaprabhas, *Am. Inkmaker* 55(9), 39 (2 pp) (1977). The properties of oil extracted from the fruit nuts of *Parinari anamense* Hance are briefly discussed. The oil contains a significant amount of elacostearic acid (three conjugated double bonds), making it suitable for curing by UV irradiation or air drying, and may be converted into an alkali-sol. adduct by cooking 100 pts. oil with 10-20 pts. fumaric acid at 200° C. for 1 hr. under nitrogen. The temp. is then raised to 210° C. for 30 mins, then reduced to 180° C. for 30 mins. An intaglio ink formulation using this adduct is suggested. The ink may be wiped from printing plates by a mixture comprising 1% each of caustic soda and sulphonated castor oil. (World Surface Coatings Abs. No. 432)

CASTOR OIL MARKET. L.J. Jubanowsky, *Am. Paint J. Conv. Daily* 62(16), 20 (2 pp) (1977). Market trends over the last 5 years are briefly reviewed, mainly in terms of U.S. imports from Brazil (the principal supplier) and some other countries. (World Surface Coatings Abs. No. 432)

INKS BASED ON INDIAN SARDINE OIL. P.C. Chatterjee, *Am.*

*Ink* 55(11), 34 (2 pp) (1977). The properties of inks based on varnishes prepared by cooking rosin-modified phenolic resins with sardine oil are examined, it being concluded that the inks show commercial promise provided care is taken to control odours during preparation. (World Surface Coatings Abs. No. 432)

MISCIBILITY OF RESINS AND WAXES. J. Verseau, *Coating* 10(12), 343-4 (1977). The miscibility of various classes of natural and synthetic resins and waxes, e.g. for use in different types of coating compositions, printing inks, insulating compositions, paper coating compositions, heat-sealing compositions, etc, are indicated. (World Surface Coatings Abs. No. 432)

UTILISATION OF SOME NON-TRADITIONAL OILS IN SURFACE COATINGS. S.B. Dabhade and B.B. Gogte, *Paintindia* 27(6), 17-21 (1977). A review is made of the use of unexploited non-edible oils in paints, including neem oil, nahor oil, walnut oil, gokharu oil, tobacco oil and kamala oil. (World Surface Coatings Abs. No. 430)

REVIEW OF 1977: OILS AND OILSEEDS. Anon. *Polym. Paint Col. J.* 167(3964/5), 1020-2 (1977). Raw material price trends in 1976 and 1977 for linseed oil, soyabean oil, etc, are