

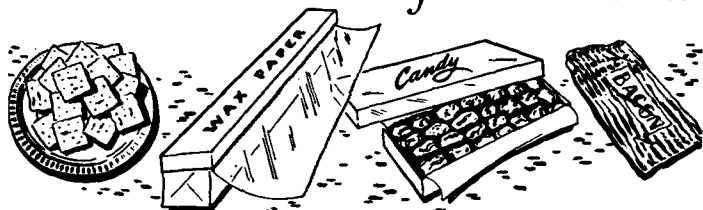
prevent rancidity in fat-containing foods

with the **Sústane**[®]
formulation
best suited to your needs

Cooking, baking, deep frying . . . no matter what your processing method, Sústane is your assurance of product freshness. Sústane BHA is used effectively alone or in combination with other antioxidants to provide a carry-through protection that keeps food fresh far longer.

Sústane antioxidants are available in several convenient, economical forms for maximum time, labor and money savings. We will be happy to recommend the Sústane formula best suited to your product.

available in 6 formulations



| ANTIOXIDANT | FORM | PRODUCTS PROTECTED |
|-------------|-------------|---|
| Sústane BHA | Tablet | Lard Shortening Edible Tallow Oleo Oil Rendered Beef Fat Frying Oils Inedible Tallow Inedible Grease Paraffin Waxes Citrus Oils Essential Oils Baked Goods Cake Mixes Prepared Foods Fish Products Confections Potato Chips Shelled Nuts |
| Sústane 1-F | Flake | |
| Sústane 3-F | Flake | |
| Sústane 3 | Liquid | |
| Sústane 6 | Liquid | |
| Sústane BHT | Crystalline | |

Technical assistance in selecting the most effective Sústane antioxidant for your specific needs is available on request. For detailed information write to UOP Products Department or our Sales Representative:

WILLIAM E. PHILLIPS, INCORPORATED
435 North Michigan Avenue, Chicago 11, Illinois

Sústane[®]
UOP UNIVERSAL OIL PRODUCTS COMPANY
® 30 Algonquin Road, Des Plaines, Illinois

• New Products

BLUE M ELECTRIC CO., Blue Island, Ill., offers a new POWER-O-MATIC 60 Saturable Reactor Control that achieves temp changes by varying the electrical characteristics of a saturable core reactor.

METTLER INSTRUMENT CORP., Princeton, N. J., announces the VIBRIO SPATULA, a new laboratory device for dispensing powdered substances with 0.1 mg accuracy.

WATERS ASSOCIATES, INC., Framingham, Mass., in conjunction with PROCTER AND GAMBLE has developed a new MINIATURE DETECTOR for monitoring the effluent of liquid chromatography columns.

LAPINE SCIENTIFIC CO., Chicago, Ill., has added a new ATOM MODEL, for cyclobutane, to their list of atom models for organic chemistry researchers and instructors. The model is made by E. LEYBOLDS NACHFOLGER, Cologne, W. Germany.

TRINITY EQUIPMENT CORP., Cortland, N. Y., developed as a further improvement of the HEAT-LES DESICCANT DRYER, a steam ejector or a mechanical pump to reduce the purge air required for regeneration.

APPLIED SCIENCE LABORATORIES, INC., State College, Pa., now has a number of new UNIFORMLY TAGGED FATTY ACID DERIVATIVES available, which should be of considerable interest in biological research.

THERMAL INSTRUMENT CO., Cheltenham, Pa., has released Model 59 ELECTRIC FLOWMETER. This instrument will measure the true mass flow rates of liquids and gases over a range of 10 atmospheres.

ANDREW TECHNICAL SUPPLY CO., Chicago, Ill., announces a new series of motor-driven TUMBLE JARS, equipped with gear reduction drive and explosion proof motors.

• New Members

Active

- Mamdouh Hassan Abed, Chemist, Curtis & Tompkins Ltd., San Francisco, Calif.
Murray C. Cooperman, Research Chemist, The Baker Castor Oil Co., Bayonne, N. J.
J. Keith Ferguson, Chief Chemist, Western Canadian Seed Processors, Lethbridge, Alberta, Canada.
Frank M. Ferrell, Commercial Development, Houdry Process and Chemical Co., Philadelphia, Pa.
Donald S. Gardner, Divisional Supervisor, Quality Control, Salada Foods Ltd., Don Mills, Ont., Canada.
DeWitt S. Goodman, M.D., Assistant Professor of Medicine, Columbia University College of Physicians & Surgeons, New York, N. Y.
H. Kenneth Hawley, Manager, Food Products Development, Procter and Gamble of Canada, Ltd., Hamilton, Ont., Canada.
John E. Heilman, Process Engineer, Technical Department Central Soya Co., Inc., Fort Wayne, Ind.
Steven J. Kalich, Chief Chemist, Christie Brown & Co. Ltd., Toronto, Ont., Canada.
Thomas G. Kane, Development and Service Representative, E. I. duPont deNemours, Inc., Wilmington, Del.
Mary Ellen Puthoff, Analytical Chemist, Procter & Gamble Co., Cincinnati, Ohio
Maynard John Rinehart, Chemist, The P. D. George Co., St. Louis, Mo.
Michael R. Schimmenti, Sales Management, Humble Oil & Refining Co., Houston, Tex.

Active Junior

- Charles Francis Cook, Research Assistant, University of Wisconsin, Stock Pavilion, Madison, Wis.
Robert Clark MacDonald, Graduate Student, University of California, Department of Physiological Chemistry, Los Angeles, Calif.



Flowsheet showing multiple-step vegetable oil refining or water washing of soluble polymers in a Podbielniak countercurrent centrifugal contactor.

A—CLARIFYING SECTION
B—WASHING SECTION
C—SEPARATING SECTION
D—WITHDRAWING SECTION

MIX... SEPARATE ...WASH... CLARIFY in a single contactor installation!

One glance at this flowsheet and you can see how a single Podbielniak centrifugal contactor can revolutionize such tricky process requirements as catalyst removal from soluble polymers and re-refining plus water washing of vegetable oils. Feed stock and reagent are brought together in an external line mixer under controlled conditions of temperature, time, pressure and degree of agitation. The mixture is then pumped into the rotor near the periphery of the contactor, where liquid-liquid phase separation is accomplished by centrifugal force. Simultaneously, wash water or other solvent enters the contactor near the center and flows outward under centrifugal force, displacing the lighter phase and forcing it to the center. This countercurrent flow through perforated cylinders provides extremely effective contacting and separation of the two liquids. Calming zones at the center and periphery provide centrifugal clarification of the effluent streams.

Enormous savings are possible with this new

technique. A Podbielniak contactor can handle highly viscous materials or liquids with suspended solids on a *continuous basis*. There is no heavy outlay for multiple batch filters, no need for frequent shut-down to flush or cleanse the equipment. A single Podbielniak unit can replace an entire battery of high speed centrifuges for clarification. Even more important, the Podbielniak contactor can be produced in special designs that will handle pressures to 600 psig and temperatures to 400° F. The entire process is a closed system with no leakage, no polymer loss, no danger of solvent evaporation.

Podbielniak centrifugal contactors have been proved in numerous pilot plant and commercial applications. A model is available for demonstration, and a processing plant can be quoted in sizes from a few gallons to 600 gpm. For more details, request Brochure P-100, or write to: **PODBIELNIAK, INC.** 3201 NORTH WOLF ROAD, FRANKLIN PARK, ILLINOIS

PODBIELNIAK

Centrifugal Contactors • Distillation Apparatus • Instrumentation



DRESSER INDUSTRIES INC.

OIL • GAS • CHEMICAL
ELECTRONIC • INDUSTRIAL

Typical centrifugal contactor with capacities to 600 gpm combined streams.

