

New Products and Equipment . . .

Merck Makes Calcium Cyclamate

Merck & Co. has added calcium cyclamate to its line of vitamins and other products for food and beverage processors.

Calcium cyclamate is a noncaloric sweetening agent used in dietetic foods, bottled beverages, and canned fruits. It is stable in baking, boiling, and freezing processes and is compatible with all of the usual flavors. Current investigation indicates the possibility that it may be useful in low-calorie baked goods and frozen desserts.

Calcium cyclamate under the Merck label is expected to be available in September as an added service to customers processing food and beverages.

PE1

Anticoagulant Rodenticide

The American Chemical Paint Company has announced a new rodenticide, Ratafin.

Ratafin is based on a new anticoagulant chemical Fumarin. The use of this chemical as a rodenticide was discovered during research in chemicals to stop blood from coagulating.

According to the company, the chemical has been used for several years in a number of foreign countries and has proved exceptionally effective and economical. One pound of Ratafin concentrate can kill up to 200 rats.

Ratafin kills painlessly and rats die after eating it over a period of from five to fourteen days without alarming the rest of the rat population. It causes no bait shyness and rats continue to eat bait until exterminated.

Ratafin is available to formulators in concentrated form to be diluted for use.

PE2

Granular Anhydrous Caffeine

A free-flowing fine granular form of anhydrous caffeine, U.S.P., is available from Chas. Pfizer & Co., Inc.

According to the company, the new product has the advantages of being denser and less dusty than older forms.

In accenting the advantages of the product Pfizer says that because it is denser, less bulk is required in formulations; handling and production is speeded because of its free-flowing properties and its non-dusting qualities reduce manufacturing loss.

PE3

Chromatography Fraction Collector

A fraction collector for chromatography is being offered by Schaar & Co. Collections can be made automatically by either the timed flow or the volumetric method.

Both culture and lipped tubes may be used for collection since support is furnished at the bottom of the tubes. Three interchangeable receiver tables or a large adapter unit for large volumes are avail-

able. All tables are equipped with three mounting holes for indexer and are interchangeable with one indexer. An electronic timer-controller, capable of indexing each tube to receive fractions on a timed-flow basis from 18 seconds up to 2 hours, is supplied if desired.

The volumetric assembly operates as follows: (1) liquid from column is received in siphon and collected in reservoir (automatic siphon); (2) pressure of sample in siphon causes solution in manometer to rise contacting electrodes, which in turn indexes the turntable, thus placing the next tube under the automatic siphon. Upon reaching siphoning level reservoir then empties into tube.

For timed-flow collection, the timer-controller is set for the established time interval to collect the desired volume. When time interval has elapsed and sample has been collected, timer-controller indexes turn table and the delivery tip is then in position to deliver into the succeeding tube.

PE5

Anodized Can for Phosphate-Cured Hams

Development of an anodized inside-enameled can to combat corrosion and protect color of canned hams cured by phosphates has been announced by American Can Co.

An aluminum cleat welded to the inside of the bottom end of the can acts as an electrode and absorbs the corrosive effects of the phosphate materials through "sacrificial" action. The new technique permits the use of phosphates in the curing process which in turn offers advantages to the packer and consumer in terms of improved quality, color, and yield of hams.

Packers started to experiment with this process last year following approval by the Department of Agriculture's Meat Inspection Branch of the use of various phosphates in curing.

Canco's technical service department says that as long as the aluminum anodizing cleat maintains positive contact with a bare metal spot on the inside of the can it is effective in combating detinning, corrosion, and discoloration of product.

Special cleat welding machines have been developed for attaching the anode to the can ends and containers are now being distributed to packers using phosphates in curing.

PE6

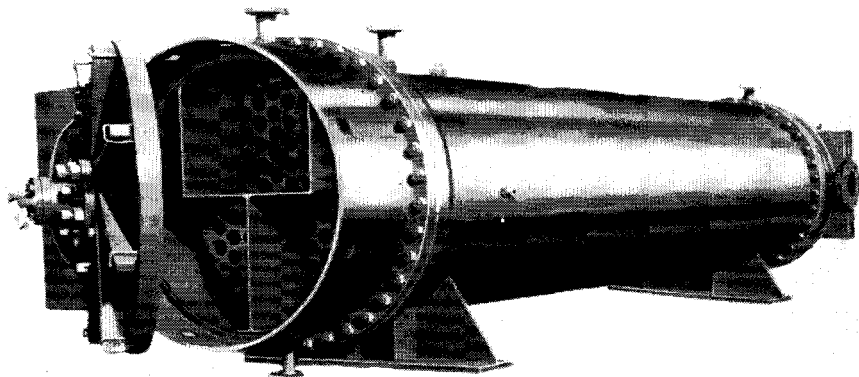
1,5 Pentanediol Useful in Making Insect Repellants

Union Carbide's Carbide & Carbon Chemicals Division announces avail-

Quick Opening Door for Heat Exchangers

Self-seating, quick-opening door, developed by the Patterson-Kelley Co., considerably reduces the time to open heat exchangers, autoclaves, sterilizers, and other pressure vessels. Taking about five seconds to open, lever-lock door is locked and unlocked by means of bars. Door is particularly suited for use on heat exchangers that carry high-fouling liquids and require frequent entry for cleaning and inspections. Capable of withstanding temperatures from -70° to 400° F., and pressure ranging from full vacuum to 300 lb./sq. in., it has also been used successfully on autoclaves and sterilizers

PE4





Laboratory Balance

Laboratory balance with features that are claimed to simplify and speed up weighing operations available from Torsion Balance Co. The features include torsion bands made of a corrosion resistant alloy, which results in longer, trouble-free life for the balance. A single beam with vernier permits accurate weighings from 0.01 g. to 10 g. without the use of loose weights **PE7**

ability of 1,5-pentanediol, which is of interest to manufacturers of insect repellent formulations. The chemical can be bought in tank car, tank truck, and drum car load quantities. The acrolein derivative undergoes reactions typical of glycols—oxidation, dehydration, esterification, and acetylation. **PE8**

Fertilizer Crusher

Pennsylvania Crusher Division has developed a new crusher for the chemical and fertilizer industries adapted to the reduction of moist granulated and pelletized materials with a minimum of fines and oversize. This crusher is said to have advantage of minimum caking or plastering of material in the crusher, along with easy and quick accessibility for internal cleaning. **PE9**

Constant Temperature Water Bath

Precision Scientific Co. has redesigned the "Temp-Trol," a portable constant temperature circulating water bath.

New features of the apparatus include a thermo-regulator, which is coupled with an electronic relay to provide faster, more accurate response to temperature change; temperature control is accurate to $\pm 0.05^\circ$ F. Other features of the redesigned apparatus include a wide temperature range, from ambient to 210° F, and a built-in cooling coil for operation below room temperature. Unlike other constant temperature de-

VICES, the water bath does not require a continuous water supply, since the 2.5 gallon capacity is ample for continuous circulation. **PE10**

Microprojector for Lectures

William J. Hacker & Co., Inc., announces a microprojector, named Mini-pro, for lecture and demonstration work. Equipment includes a miniature precision microscope, with revolving triple nosepiece and objectives providing magnifications from 200 to 800 times. The microscope can be employed separately, and slides with liquid specimens can be projected. Light source is a 30-watt low-voltage projection lamp with stand, transformer projection mirror, and variable collector lens. Images can be projected at distances of 10 ft. **PE11**

Detection of Sulfur Compounds

An air well bath for detecting free and corrosive sulfur compounds is available from Modern Laboratory Equipment Co., Inc. Apparatus consists of a constant temperature bath with precision control and a constant level device. Each of the four air wells has a glass condenser mounted on cork disks. **PE12**

Microviewer

William J. Hacker & Co., Inc., offers its Micro-Viewscope which renders an image in an 8-in. viewing screen. Magnification is from 75 to 100 times.

The instrument can be equipped for observations in polarized light and for photomicrography. **PE13**

Bulk Storage Unit with Swing Control Gate Valve

An all-steel bulk storage unit for fertilizer, feed, rock phosphate, and other free-flowing materials has been developed by Andrews Machine Co. This unit is available in 10 or 25 ton capacities and is fabricated in one unit on four legs, eliminating assembly after delivery.

The unit has a hopper bottom with a swing control gate (not a sliding valve) for discharge control. The bin is made of 12-gage steel with 16-gage steel used for the top. An 18-in. manhole and cover for loading is located on the top with a ladder leading down the inside for easy access into the bin. **PE14**

High Capacity Laboratory Balance

A laboratory balance, designated model HT-1, that combines large capacity with high sensitivity, has been announced by The Torsion Balance Co. It has an S.R. of 0.75 grams (0.75 gms.

causes the pointer to deflect two index divisions) and a capacity of 14 kg. Two slide weights on a single beam permit weighings from 1 gram to 1000 grams without the use of loose weights. It is normally equipped with 10-in. iron plates; however, ring bottom scoops of various sizes with counter-poise are available. **PE15**

Pressure Sensitive Caution Labels

Pressure sensitive caution labels are offered by Avery Adhesive Label Corp. The labels are said to meet the requirements of the Interstate Commerce Commission for flammable liquids or highly volatile liquids. Manufacturers of such materials ordinarily ship the liquids in barrels, drums, and other containers which are difficult to label on a conveyer-belt or production-line basis. Avery Adhesive points out that under these conditions, labelers must move from container to container with bucket of glue or water and brush or sponge. The pressure-sensitive label, it claims, eliminates those difficulties and saves time. **PE16**

Vacuum Gage

A Bennert-type manometer, for the determination of absolute pressures in the range of 0 to 240 mm. is now being manufactured by the Kontes Glass Co. Zero adjustment of the moveable scale is provided through a rack and pinion gear assembly enclosed within the instrument. Control knob mounted on the side of the aluminum housing permits an operator to manipulate the sliding scale with ease and accuracy, according to the manufacturer. Glass component parts can be obtained separately and installed by the user in the event of breakage **PE17**

