

New Products and Equipment . . .

Shea Chemical Offers Liquid Phosphate for Feeds

Shea Chemical Corp. has announced immediate availability of liquid phosphate feed supplements for the feed industry. Deliveries will be made from plants at Adams, Mass., Columbia, Tenn., and Jeffersonville, Ind.

The company offers technical engineering assistance and nutritional service to feed plants which wish to switch from dry phosphate to the liquid material.

According to Shea, cost of phosphorus per unit is approximately \$3.59 (not including freight) with liquid phosphate, compared with \$4.00 for dry phosphate supplements. However, Shea stresses the advantages of simplified handling, more compact storage, and flexibility of the liquid.

PE1

Thiram to Be Marketed as Apple Fungicide

Thiram, a dithiocarbamate used as a seed protectant and turf fungicide for the past 10 years, is the chemical base of an apple fungicide being readied by Du Pont Co. for marketing this season. To be trade-named Thylate, it is now being reviewed by FDA for the setting of a residue tolerance. Thiram is tetramethyl thiuramdisulfide.

According to the company, tests have shown that it gives good control of cedar-apple rust. It is also being studied for control of various other diseases of fruits and vegetables.

PE2

Cylindrical Polyethylene Tanks

A 40-gallon, cylindrical polyethylene tank with handles has been developed by the American Agile Corp. It can be used to handle hydrochloric and diazot solution.

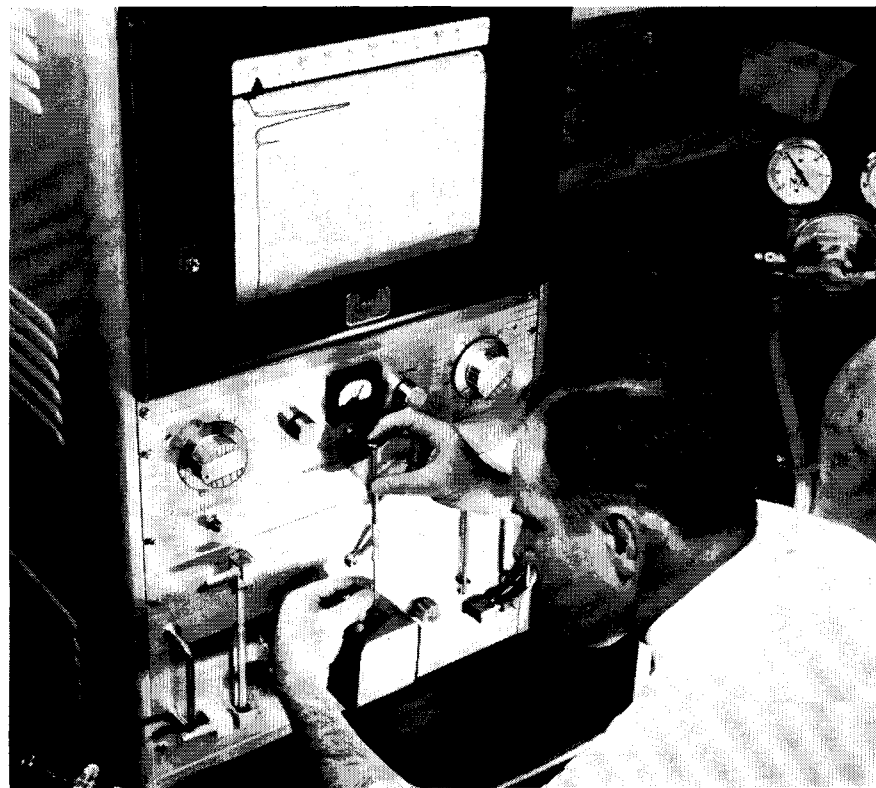
The tank is 26 in. high and has a 22 in. inside diameter.

To make the container transportable, a flat steel band was formed and steel handles welded to it. This band and the handles were then sand blasted and sprayed with polyethylene to provide a coating $\frac{1}{16}$ in. thick.

PE3

Instrument Based on Gas Partition Chromatography

The Fisher-Gulf Partitioner, an instrument for automatic qualitative and quantitative analyses of gases and volatile liquids by gas-liquid partition



The Fisher-Gulf Partitioner analyzes gases and volatile liquids qualitatively, quantitatively, and automatically by gas-liquid partition chromatography. A research and quality control tool, it can be run by technicians

chromatography, is available from Fisher Scientific Co.

The instrument uses a 14-foot thermostatted chromatographic column to resolve each mixture. Each compound is indicated as a separate peak in a "spectrum." An integrator simultaneously computes and records a number proportional to the quantity of the component making the peak. Although developed for analysis of petroleum and petrochemicals, the Partitioner can also be used in research and quality control of foods and beverages. According to Fisher, a technician can run it.

PE4

Plastic Tarpaulins

Vinyl plastic tarpaulins for a variety of agricultural uses are being marketed by Larvacide Products, Inc. under the trademark Larvacover. Suggested uses include steam-sterilization covers, silage covers, soil-fumigation covers, greenhouse bench lines to permit double checking, erosion preservatives, irrigation-ditch lines, and water conservation aids.

The tarpaulins are made from a special formulation of Ultron vinyl plastic (a product of Monsanto Chemical Co.), which is said to give high

resistance to steam, gas fumigants, and ultraviolet rays.

The tarpaulins are supplied in two colors—clear and dark green. The latter is recommended for applications in which plant shading is desirable or prolonged exposure to sunlight is contemplated.

PE5

Pilot Plant Mixers

E. Machlett & Son has announced the Aero-Seal Chemixer, specifically designed for the rapid mixing of chemicals in pilot plant scale procedures.

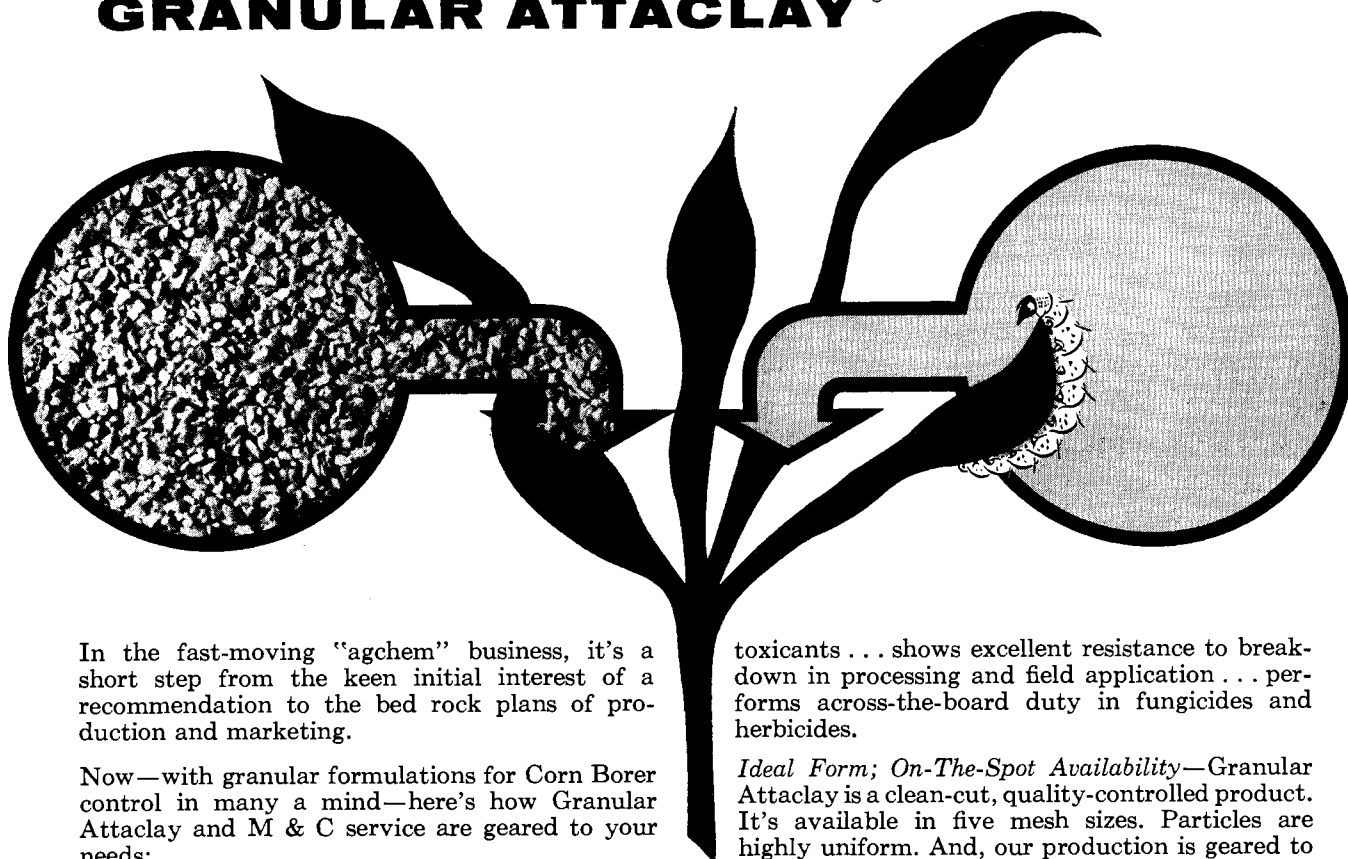
Driven by a 0.1 hp. motor, the mixer produces speeds from 100 to 10,000 r.p.m. and efficiently handles between 100 ml. to 4 liters of materials by utilizing the appropriate container. Six Pyrex containers of varying capacity are available.

The top-drive mixer utilizes 18-8 stainless impellers and is equipped with a specially designed Teflon aerosol-free cap assembly for containers. Dangerous aerosols are contained while mixing and outside impurities are kept out, the company claims.

Optional with the new mixer is a 1000-watt, three-heat hot plate in base of unit for maintaining constant tem-

a timely and important message to formulators

For Your **Corn Borer Granular Pesticides**
standardize on the original, pioneer carrier—
GRANULAR ATTA CLAY®



In the fast-moving "agchem" business, it's a short step from the keen initial interest of a recommendation to the bed rock plans of production and marketing.

Now—with granular formulations for Corn Borer control in many a mind—here's how Granular Attaclay and M & C service are geared to your needs:

Good History—Technological development in our own laboratories has produced the excellent properties in today's production of granular carriers for pesticides.

The Route To Superior Products—Granular Attaclay is highly sorptive . . . combines ideally with

toxicants . . . shows excellent resistance to breakdown in processing and field application . . . performs across-the-board duty in fungicides and herbicides.

Ideal Form; On-The-Spot Availability—Granular Attaclay is a clean-cut, quality-controlled product. It's available in five mesh sizes. Particles are highly uniform. And, our production is geared to put Granular Attaclay in the Corn Belt in needed amounts at the right time.

LET'S WORK TOGETHER

Just off press—an edition of Pesticide Digest filled with facts about corn borer control and granular pesticides. Use the coupon for free copy, samples, technical help.



"BUY EARLY" — makes good sense to processor, dealer, grower.



ATTAPULGUS PRODUCTS from



MINERALS & CHEMICALS CORPORATION OF AMERICA
 12 ESSEX TURNPIKE, MENLO PARK, NEW JERSEY

ALWAYS A BETTER WAY...

MINERALS & CHEMICALS CORPORATION OF AMERICA
 12 Essex Turnpike, Menlo Park, N. J.

Please send me:

- Pesticide Digest described above
 Test samples of Granular Attaclay for the following applications:

 name _____ title _____
 company _____
 address _____
 city _____ zone _____ state _____



New Products and Equipment

peratures during mixing. Also available are stainless steel cooling containers. **PE6**

Monsanto Offers Phosphate Feed Solution

A liquid phosphate feed supplement is being marketed by Monsanto Chemical Co. to feed formulators as a replacement for dry-form phosphate supplements. The company says liquid materials are less expensive and labor-saving.

According to Monsanto, only minor plant changes and relatively small capital investment are necessary for manufacturers using conventional processes. The company also points out that its research has found no detrimental effect on vitamins, antibiotics, and other components of animal feeds from the solution.

Monsanto's feed solution contains a minimum of 23.7% phosphorus, compared with a range of from 18 to 21% in dry forms of phosphate. **PE7**

British Extractor Offered in U. S.

The Protess extractor, developed and manufactured by E. H. Bentall & Co., Ltd., of England, is being offered in the U. S. through Western Electric Engineering Co.

Developed for use on fodder crops, such as grass and alfalfa, it is said to be attracting attention for many other extraction jobs on such materials as peanuts, hops, coconuts, linseed, and others.

In agricultural use, the extractor separates a protein-rich juice, which can be dried for use as pig and poultry feed, from the fiber, which produces a silage with low water content. The liquid is said to provide a valuable source of protein, carotene, vitamin B, and xanthophyll.

The extractor is available in three models for laboratory and plant. **PE8**

Radiation Analyzer for Gamma Ray Spectrometry

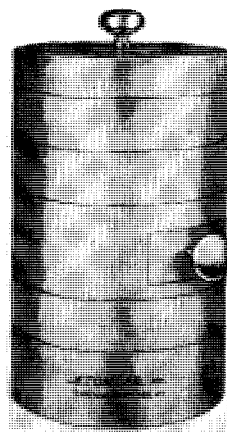
The model 1810 radiation analyzer, announced by the Nuclear Instrument & Chemical Corp., is used with a scaler or rate-meter and scintillation counter to make possible more precise measurements of gamma emitting radioactive samples. An adjustable "window" in the analyzer may be set so that only those pulses that fall within a preselected portion of the isotope's energy spectrum are counted, thus virtually eliminating background and scattered radiation from the final count. In addition, the unit permits

multiple tagging measurements and radioisotope energy analysis.

The instrument, for use in medical, biological, and industrial laboratories where gamma emitting isotopes are used, consists of a non-overloading linear amplifier, pulse height discriminator, and stable high voltage regulator. Circuitry has been designed for simplicity, extreme stability and high reliability. **PE9**

Adjustable Lead Shield for Measurement of Radioactivity

An adjustable lead shield for use in making radioactivity measurements on



low activity samples and as a temporary storage area for dangerous radioisotopes is offered by the Atomic Center.

The shield is variable in both function and size by the simple addition or substitution of various pieces. Five different types

of interlocking sections are available, ranging from 25 to 55 lb. each.

According to the Atomic Center, the shield is used to improve accuracy in counting by placing the Geiger tube or scintillation probe inside the cylindrical enclosure. The shield's 1.5 in. of lead prevents background radioactivity from increasing the reading. **PE10**

3000-lb.-Capacity Fork Truck

A 3000-lb.-capacity fork truck, the second of its Cargo-Scout series, has been introduced by Elwell-Parker Electric Co.

The truck is engineered to handle loads in confined areas at maximum speeds. It features a short wheelbase and 360° steering to permit maneuvering in narrow aisles and inside truck trailers and box cars. A device on the steering mechanism is said to prevent steering wheel kick-back. Additional features include a worm drive, packaged unit assemblies, contactor controls, and a caster-type trail axle. **PE11**

Vibrating Screen for Fertilizers

A high-speed vibrating screen said to be 30 to 80% faster than previous mechanical screens has been developed by Hewitt-Robins, Inc., for the fine screening of such materials as sand,

clay, fertilizers, chemicals, asbestos, and instant coffee.

The screen has a speed of 3300 r.p.m. when set for a $1/32$ -in. stroke and 2400 r.p.m. when operating on a $1/16$ -in. stroke. The new screen features a lubricating technique in which atomized oil is injected under pressure into bearings in a fine airborne mist. This oil mist system is said to prevent the overheating of bearings formerly encountered at high speeds when conventional grease and lubricating oils were used.

Called the HS Vibrex, it is especially designed for use with screen cloth of 10 to 80 openings per lineal inch. Under certain conditions it will be suitable for separations as high as 100 mesh, the company says. Wet or dry materials can be screened, and the unit is designed for applications requiring electrically heated screen cloth to prevent blinding of cloth openings by damp materials.

The new screen requires less headroom than previous models, and it handles most materials at an inclination from 10° to 15°. **PE12**

Portable Acid Pump

A portable, electric pump which conveniently and safely transfers acids from open vessels as well as from standard carboys and drums has been announced by the General Scientific Equipment Co. Previous pumps of this type were limited to use on closed vessels.

The Centri-F pump is particularly useful in transferring acids from plating, pickling, or small storage tanks. No acid remains in the pump when it is removed from the container, thereby providing operator safety.

The pump delivers a steady, spurt-free flow of acid at the rate of approximately six gallons a minute, the company says. Self-priming and lightweight, the pump can be positioned and operated by one man. Pump is furnished in materials suitable for the particular acid service specified. **PE13**

Reflux Condenser

Scientific Glass Apparatus Co., Inc., announces development of a reflux condenser, known as the Dalin coil condenser, which features a novel by-pass joint. Because of this construction, it is claimed that the possibility of valuable products of a synthesis spurting through the top of a flooding reflux condenser is overcome.

The by-pass joint, an integral part of the condenser, is also available as an adapter, making it possible to connect condensers of large capacity to flasks with smaller joints. **PE14**