

Business Newsletter...

EXPANSION NEWS

Chemical & Industrial Corp. has contract to build nitric acid and ammonium nitrate units for Calspray's new fertilizer plant at Kennewick, Wash. Actual cost figures for the plant were not made public, but total cost is believed to be about \$2 million. Upon completion late this year, plant will turn out ammonium nitrate, ammonium nitrate solutions, and high analysis nitric phosphate complex fertilizers for Pacific Northwest and Rocky Mountain distributors.

Armour plans to acquire anhydrous ammonia and potash production facilities this year. W. W. Prince, Armour president, told a stockholder meeting that nitrogen and potash sources are necessary to make the company's fertilizer operations more profitable, especially in light of stiff competition from co-ops. Armour has not said whether it will lease or buy the facilities, however.

Construction is being started on an \$8.5-million nitrogen fertilizer plant at Lukavaz, Yugoslavia. Fauser-Montecatini processes will make 100 metric tons of anhydrous ammonia a day, 340 metric tons of nitric acid, and 380 metric tons of nitrochalk containing 20.5% nitrogen. Coke oven gas for raw material will come from existing coke plant there. Ansaldo of Genoa will supply equipment and machinery.

Wisconsin Alumni Research Foundation has acquired a research farm. It is near present laboratory facilities. Farm will allow WARF to expand its research and development work in poultry and stock feeding programs, feed additives, and pesticide trials.

MERGERS

Food Machinery & Chemical has purchased Sunland Industries through an exchange of stock, details of which were not made public. Sunland Industries has produced agricultural chemicals, fertilizers, and seeds for sale to California growers for the past 30 years.

Emulsol Chemical Corp., a subsidiary of Witco Chemical, has been merged into Witco's organic chemicals division. Emulsol's line of products, some of which are used in formulating pesticides, will be broadened as a result, says Witco. In addition, Emulsol will get a 50% expansion of its research facilities, which are being moved and consolidated with Witco's in Chicago.

PROCESS CHANGES

Cyanamid of Canada, Ltd., will spend about \$5 million to convert from imported coal to natural gas as raw material at its ammonia and ammonium nitrate facility at Welland, Ont. Changeover is expected to increase capacity. Completion is expected in about 12 months.

Koppers has changed output of its ammonia recovery unit at Kearny, N. J. from ammonium sulfate to monoammonium phosphate. Company explains ammonium phosphate demand is increasing.

PRODUCT NEWS

USDA has given Davison's Dri-Die Insecticide 67 (silica aerogel with ammonium fluosilicate coating) a permanent label registration. Similar authorization has come from state regulatory agencies. Nationwide distribution follows, through pest control chemical distributors.

Monsanto has a new heat-stabilized methyl parathion for use in dust formations. First output went to formulators March 23 (see page 236).

A controversial "bread softener" and emulsifier for processed foods has a new lease on life. In a 17-page report released March 19, the Food Protection Committee of the National Academy of Sciences-National Research Council announces its conclusion, after extensive study of all available data, that "use of polyoxyethylene (8) stearate at levels not greater than 0.05% in the human diet would be safe."

Louisiana, Mississippi, and Texas have added Union Carbide's Sevin to their lists of chemicals recommended for cotton insect control.

Rohm & Haas has reduced the price of Kelthane miticide. Company says orchard men will get Kelthane W formulations for about 15 cents less per pound than they paid last year. Expanded production to meet increased demand is the reason Rohm & Haas gives for reduction.

A stabilized solution of diethylstilbestrol for use in the drinking water of chickens is being introduced by Eastern Laboratories, Vineland, N. J. Product has approval necessary for sale in interstate commerce, the company says.

A "stretchable" multiwall paper bag is being offered to fertilizer producers on the West Coast. It is made by West Virginia Pulp & Paper from Kraftman Clupak stretchable paper. Called Wonderwall, the bag is said to be tougher and stronger than its predecessors, to give on impact, and to resist breakage and rough handling. It is said to pack faster, handle easier, and cost no more than other bags.

Michigan Chemical, which stopped making DDT during 1958 and has liquidated all its DDT inventory, tells stockholders it will not re-enter DDT manufacture until "price situation becomes more favorable." Some DDT equipment meanwhile has been diverted to other products, and research is under way to put more of the remaining facilities into other commercial applications.

RESIDUE TESTING FOR GROWERS

Hazleton Laboratories, which has been operating a pesticide residue testing service for California growers from its new laboratory at Palo Alto, is now expanding the service to include Arizona. Formerly referred to as its Growers Service Department, this unit will now be called Growers Residue Service. Valley Laboratories in Phoenix will handle sample collection in Arizona. Hazleton makes its analytical facilities and skills available to pesticide applicators and to growers on a fixed-fee basis and on a time-schedule designed to keep growers within the residue tolerances set by FDA.

DEALER AID FROM ALLIED

Allied's Nitrogen Division has started a new service--weather forecasting--for its fertilizer customers all over the country. Each month, dealers and manufacturing customers will get a four-page color folder of weather maps and tables showing expected precipitation and temperature patterns for all areas. Said to be 80% accurate, the forecasts are prepared by Weather Trends, Inc., one of the oldest private weather forecasting services in the nation. Allied expects forecasts will help dealers to plan their fertilizer operations, which are exceptionally dependent on weather conditions.

Business Newsletter...

INSECT DETECTION

USDA is organizing to put more emphasis on insect detection. Joseph W. Gentry will be in charge of the new program, which will seek to detect any insects not known to occur now in the U. S. as well as those not now known to occur in certain areas of the U. S. Program will be a cooperative one among the National Plant Board, USDA, State departments of agriculture, and the Western Plant Board. Impetus for this new emphasis came as result of success in eradicating Medfly several years ago—entomologists now believe that if a new pest is detected soon enough, eradication can be accomplished. Biological warfare aspects are also behind the move.

FDA DOINGS

Food and Drug Administration completed and made publicly available late in March its regulations for operating under the new food additives law. They were published in the Federal Register of March 28.

The House has passed legislation allowing use of Red Citrus 2 for coloring oranges. It will replace Red 32, which was outlawed in a Supreme Court Decision late last year. The Senate had already passed the legislation. The President is expected to approve.

Although FDA has outlined its philosophy on what any new food color law should contain, it will be a few months before details are sufficiently ironed out to present them to Congress for action.

Food additives makers now have until April 9 to comment on list of substances FDA considers generally recognized as safe for use in food. This is the second extension of the deadline.

MEETINGS

Animal Health Institute, Shoreham Hotel, Washington, D. C., April 12-14.

American Association of Cereal Chemists, Hotel Statler, Washington, D. C., May 3-7.

American Society of Brewing Chemists, Montreal, May 10-14.

Chemical Institute of Canada, Halifax, May 24-27.

Inter-American Food Congress, Carillon Hotel, Miami, June 9-13.

California Fertilizer Conference, University of California, Davis, June 29-30.

Gordon Research Conference on Biochemistry and Agriculture, Kimball Union Academy, Meridan, N. H., Aug. 3-7.

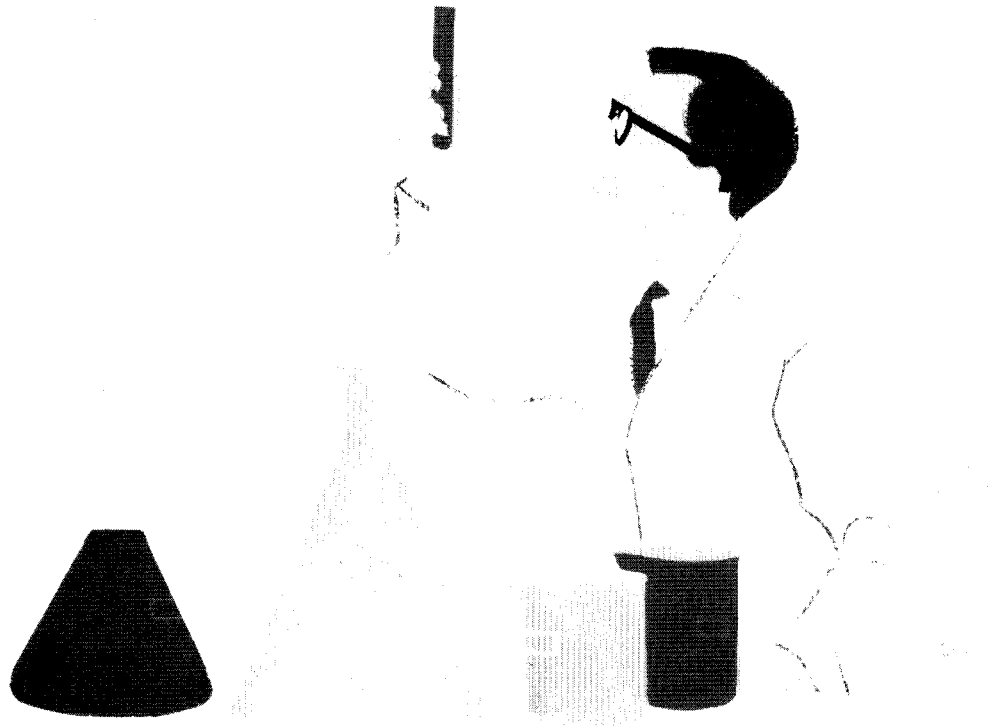
American Dietetic Association, Shrine Convention Hall & Auditorium, Los Angeles, Aug. 25-28.

Soil Conservation Society of America, Rapid City, S. D., Aug. 26-29.

National Agricultural Chemicals Association, French Lick-Sheraton Hotel, French Lick, Ind., Oct. 21-23.

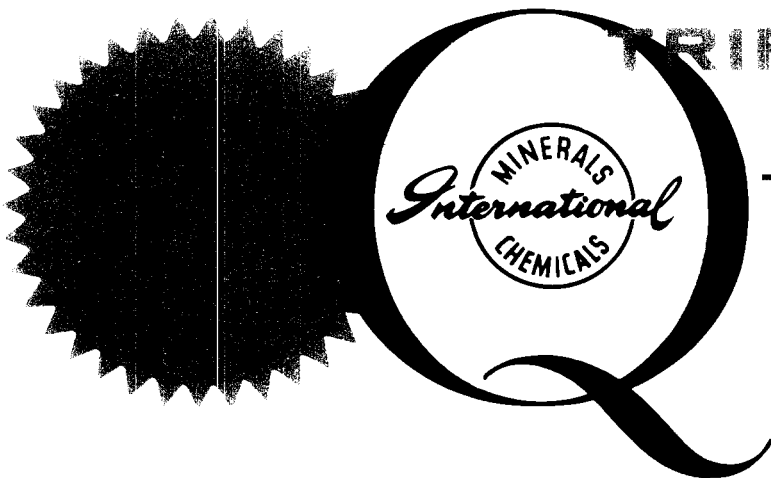
- Fate of superphosphoric acid hinges on freight rates (page 233).
- Research on effects of pesticides on wildlife may bring end to heated controversy. (page 234).
- Progress in methods of desalting water does not yet hold out hope for farmer (page 238).
- Boom in fertilizer production of co-ops draws fire of nonco-op business men (page 242).

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CHECK OUT COUNTER THAT KEEPS TAB ON

TRIPLE SUPER

Quality

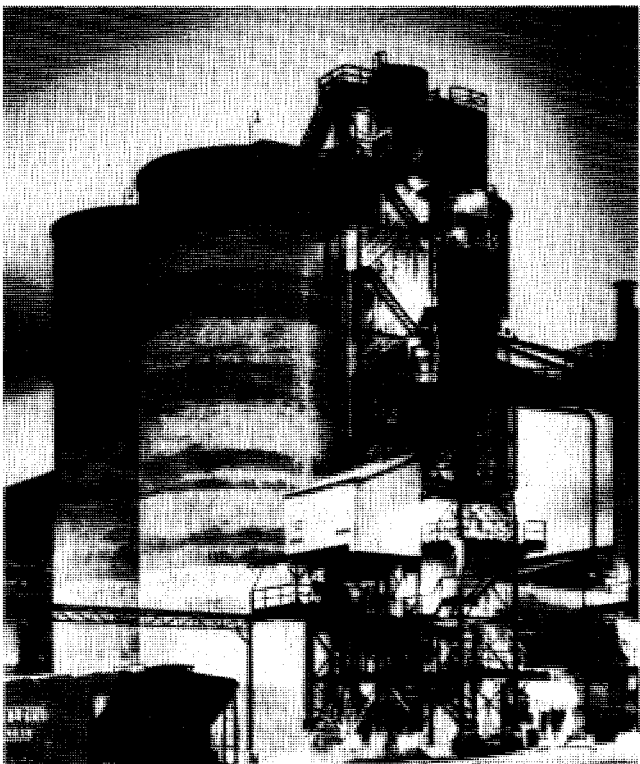


Quality of product carries a lot of weight with manufacturers who buy fertilizer materials. That's why...

International quality from

Over 40 separate tests, more than 400 chemical analyses daily help produce a uniformly superior Triple Superphosphate that's conditioned for trouble-free shipping

Product quality rates high with users who stay with International's Triple Superphosphate. The right combination of chemical and physical characteristics means a uniform product that holds caking problems during shipping and storing to a



STORAGE — Triple superphosphate (granular, run-of-pile, coarse) is stored and cured in a 90,000 ton warehouse for a minimum of 5 weeks to assure desirable chemical and handling characteristics . . . maximum plant food availability.

PLANT FOOD MANUFACTURER — Final control check . . . 6 quality tests made as triple superphosphate is loaded for shipment.



checks out Triple Super Bonnie right to your plant

minimum. Easier handling and superior ammoniating qualities result.

Much of the credit goes to the technical task force that guards the quality of International's Triple Super. For testing is a round-the-clock operation at Bonnie, Florida. Testing follows every phase of processing . . . starting at the mine and climaxing in a rigid final checkout that each shipment must pass before it can load and go.

After International's Triple Super has been processed into three grades — granular, run-of-pile, coarse — it is stored and cured in a 90,000 ton warehouse for a minimum of 5 weeks. This produces the finest chemical and handling characteristics . . . maximum plant food availability. Then comes the final checkout: six quality control tests made *as triple is loaded for shipment!*

Painstaking? You bet it is! And worth every

bit of the extra effort in terms of your confidence that every shipment of International's Triple Super is as high in quality as today's finest processing can make it.

With triple ready to roll, International service takes over. There's shipping — by rail, barge, ship — whichever method keeps your costs lowest. You benefit from service that's tailor-made for your own plant — delivery by river barge . . . on-site storage at key transportation centers . . . rolling warehouse shipments. That's why International's services can't be matched by any other supplier.

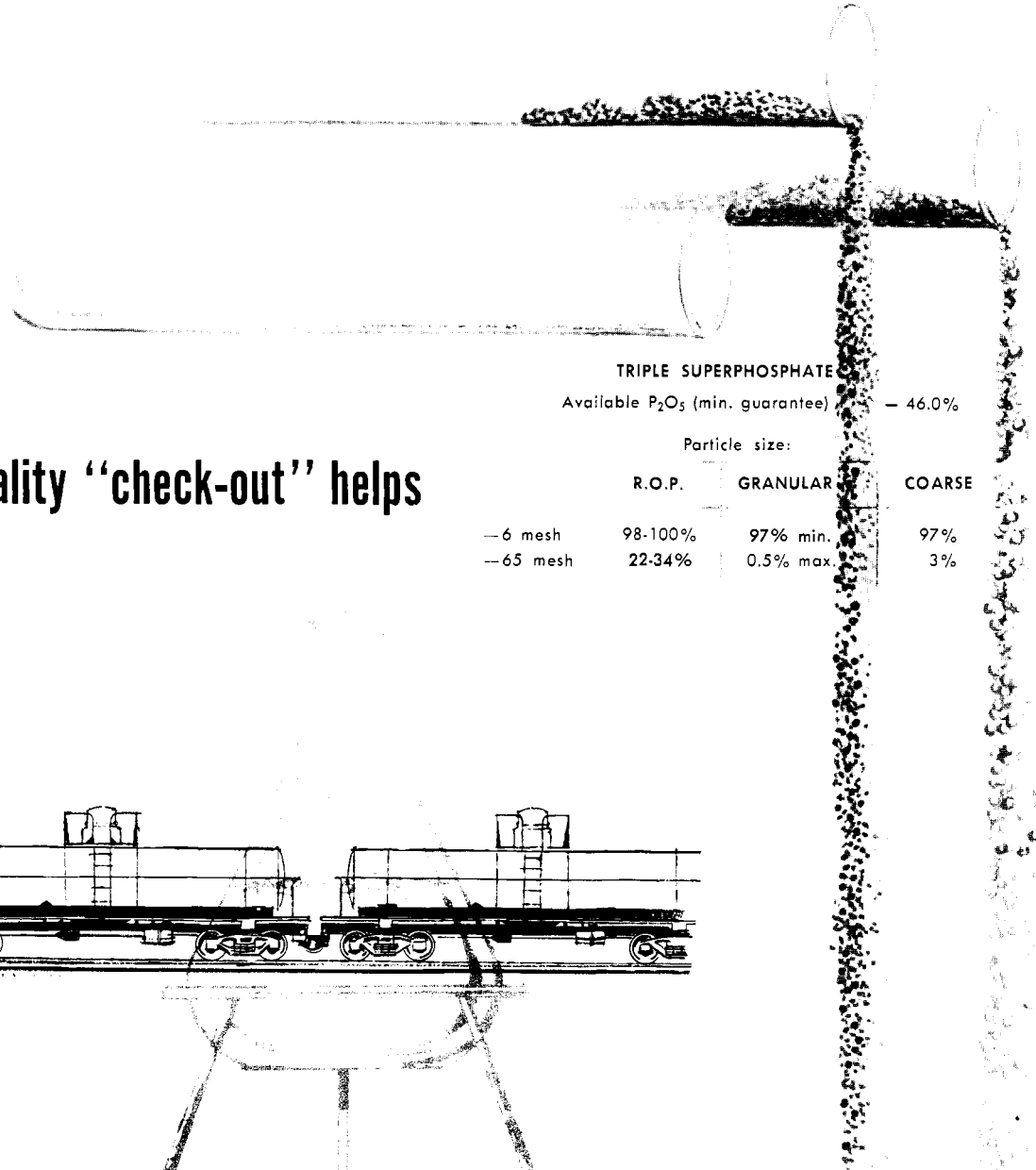
And there's International's staff of experts, ready to help on formulation and equipment problems . . . designing plant layouts . . . streamlining materials handling — *at no cost to you!*

To sum it up — you profit when you depend on International's Triple Super.

COARSE — International's coarse-textured Triple gives you the same excellent ammoniation batch after batch . . . promotes desirable agglomeration.

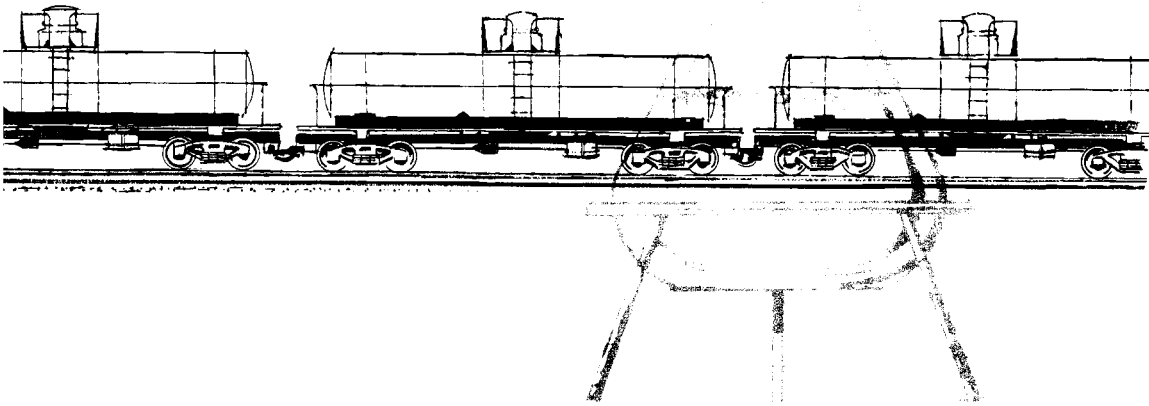
GRANULAR—International's granular Triple is non-crumbling, free-flowing, makes granulation easier. Sponge-like structure of granules facilitates ammoniation.

RUN-OF-PILE — International's fine-textured Triple provides uniform particle size, even density and proper moisture level that lets you ammoniate at higher rates, temperatures.



International's quality "check-out" helps you get full value from your phosphate dollar

| TRIPLE SUPERPHOSPHATE | | | |
|--|---------|-----------|---------|
| Available P ₂ O ₅ (min. guarantee) | | | — 46.0% |
| Particle size: | | | |
| | R.O.P. | GRANULAR | COARSE |
| —6 mesh | 98-100% | 97% min. | 97% |
| —65 mesh | 22-34% | 0.5% max. | 3% |



A complete line of triple superphosphates and phosphoric acid solves formulation problems

Now you can make International your dependable single source of all high-analysis phosphate ingredients. Benefit from International's three grades of top-quality triple superphosphate plus high purity 53%-55% phosphoric acid. Get all the quality advantages International's processing adds to your product.

Be sure with International.



Creators of Living Minerals

SPECIAL PRODUCTS DEPT., PHOSPHATE DIVISION

INTERNATIONAL MINERALS & CHEMICAL CORPORATION

Administrative Center: Skokie, Illinois

Research Newsletter...

GARLIC AS A FUNGICIDE

Experiments at the University of California indicate the possibility of controlling bacterial and fungal diseases of plants with juice from garlic cloves or aqueous extracts of garlic powder. Garlic was effective, reports Peter A. Ark (Plant Disease Reporter, Feb. 15 issue), against downy mildew of cucumber, bean anthracnose, brown rot of stone fruits, cucumber scab, and certain bacterial diseases of cucumber and bean. Garlic's objectionable odor can be neutralized by an alpha-neutroleum.

UTILIZATION RESEARCH

House of Representatives has before it 14 bills designed to increase research on industrial utilization of agricultural surpluses, but only two are expected to get serious consideration. One of these would expand utilization research in USDA, the other would set up a new agency to handle a crash program. Subcommittee seems to prefer the latter, charging that USDA and land grant college scientists are too production-research minded. USDA and the land grant colleges prefer former approach, counter that farm group pressure for cheaper production methods keeps most of their researchers working on production problems.

HIGH-GAMMA BHC

Yield of gamma isomer in manufacture of benzene hexachloride can be increased from around 15% of the total product to as much as 31%, according to chemical engineers at Columbia Southern. Their report (in the April issue of Industrial & Engineering Chemistry) says high gamma can be obtained by photochlorination of benzene in a polar solvent, at low temperatures, and with controlled chlorine concentrations. Commercial use of their discovery will mean savings in raw material costs and in shipping costs per pound of active ingredient.

NEW JOURNAL FOR INSECT PATHOLOGISTS

Scientists interested in biological control of insects may wish to subscribe to the new Journal of Insect Pathology. First issue will come out in April (four issues will come out in 1959). Managing editor will be Edward A. Steinhaus, University of California leader in biological control work. Information can be obtained from Academic Press, 111 Fifth Ave., New York 3, N. Y.

DIAZINON DEGRADATION

Geigy researchers report they have pinned down the structure of the compound that gives high cholinesterase activity to Diazinon when it is stored in the presence of small quantities of water (Ag and Food, December 1958, page 875). It is monothiono-TEPP. The full report is in Helvetica Chimica Acta, volume 40, page 1562.

- Gas chromatography shows promise in rapid residue analysis (page 250).
- Insecticidal activity, low mammalian toxicity found in new series of organophosphates (page 251).
- Highly sensitive method determines traces of Co-Ral in variety of animal tissues (page 256).
- Synthesis of plant growth regulator Amo-1618 described (page 264).

A graphic consisting of the word "Spotlight" in a stylized, handwritten font, overlaid on a dark, textured circular shape that resembles a spotlight beam or a shadow.