

Why we bother with molecular distillation

Molecular distillation under high vacuum is a lot of trouble we wouldn't go to if we knew of a better way to do what we're doing.

It happens to be the most economical and practical way to take a reaction mixture of glycerine and a fat and strip off only the molecules with one fatty acid chain. And it works fine. We produce monoglyceride emulsifiers of unusually high monoester content by the tank car; monoglycerides free of soaps, catalysts, and free fatty acids; creamy white monoglycerides as wholesome as any food we know of. We call them Myverol Distilled Monoglycerides.

Now Myverols cost more to buy than the usual mono-diglyceride mixtures. They have to. But they cost less to use because they go so much farther in emulsifying effectiveness per pound.

Take shortening for household use, for example. One percent Myverol Distilled Monoglycerides does a real job. What other monoglyceride preparation will do much at a level as low as that? And, because they're so pure, you can add Myverols after deodorization without affecting the color, odor, or flavor of the finished product.

We make Myverol Distilled Monoglycerides in a number of types from a number of fats and oils. The best way to evaluate them is to try some in your own product. We'll send you samples without charge. If you'll let us know what you want them for, we'll recommend the type. *Distillation Products Industries*, Rochester 3, N. Y. Sales offices: New York, Chicago, and Memphis • W. M. Gillies and Company, Los Angeles, Portland, and San Francisco • Charles Albert Smith Limited, Montreal and Toronto.

"Myverol" is a trade-mark.

distillers of
monoglycerides
made from
natural fats
and oils



Also... vitamin A in bulk
for foods and pharmaceuticals

Distillation Products Industries
is a division of **Eastman Kodak Company**

People and Products

A new manually operated hydraulic closing device for filter presses has been developed by D. R. SPERRY AND COMPANY, Batavia, Ill.

BECCO CHEMICAL DIVISION, Food Machinery and Chemical Corporation, Buffalo, N. Y., has announced a new process for continuous hydrogen peroxide bleaching of textiles which eliminates the possibility of silicate scale formation.

Wallace R. Brode, associate director for chemistry at the NATIONAL BUREAU OF STANDARDS, Washington, D. C., received an honorary Doctor of Science degree at the 96th commencement of Whitman College.

Five research scientists at the SOUTHERN UTILIZATION RESEARCH BRANCH of the U. S. Department of Agriculture who received superior service awards from the department are Walter A. Pons Jr., A. M. Altschul, F. H. Thurber, Evald L. Skau, and C. A. Fort.

John F. Broeker, sales promotion manager of white pigments for E. I. DU PONT DE NEMOURS AND COMPANY INC., Wilmington, Del., has retired after 35 years with the company. His successor is Martin C. Londergan.

A new synthetic glycerine plant at Velasco, Tex., marks the entry of DOW CHEMICAL COMPANY into glycerine manufacture.

HENRY FRASER JOHNSTONE, head of the chemical engineering division at the University of Illinois, was presented the Army Exceptional Civilian Service Decoration at the annual meeting of the Armed Forces Chemical Associates in recognition of eight years' service as a consultant to the Army Chemical Corps.

Robert S. Aries, president of R. S. ARIES AND ASSOCIATES, New York, N. Y., reports after a three-month tour in Europe that industrial production in western Europe increased 5% in 1953; 9% in 1954, and an estimated 5% in the first six months of 1955.

SHARPLES CHEMICAL INC. has become an operating division of the Pennsylvania Salt Manufacturing Company, Philadelphia, Pa.

A new plant for the production of pentaerythritol and related products is planned by HEYDEN CHEMICAL CORPORATION, New York, N. Y.

The MICROCARD FOUNDATION has moved from Middletown, Conn., to Madison, Wis., where it is now affiliated with the University of Wisconsin Press.

EL INSTITUTO ARGENTINO DE RACIONALIZACION DE MATERIALES (I.R.A.M.), Avellaneda, has initiated a commission for the study of detergent standards.

A new plant recently completed by ARIZONA CHEMICAL COMPANY, New York, N. Y., increases the company's production capacity for fractionated tall oil products by two and one-half times.

Snell Offers Annual Index

Foster D. Snell Inc. New York, N. Y., has announced publication of the first annual index, covering the year 1954, for "Chemical Market Abstracts," a monthly literature research service. The annual index contains more than 22,000 separate entries, classified under six major subject headings. According to Marshall N. Levin, editor, the publication of the index marks the first time that a complete guide to the events of an entire year, specifically of interest to the chemical industry, has been made generally available.

Plans Congress Book

The 46 papers presented at the third FATIPEC Congrès de la Fédération des Associations de Techniciens des Industries des Peintures et Encre D'Imprimerie de L'Europe Continentale will be published in a "Congress Book" to be off the press in September. Copies may be obtained from the association's General Secretariat, 32 rue Joseph II, Brussels, Belgium, upon payment of 650 Belgian francs.



Important vitamin A research sometimes

looks like this: No test tubes. No faraway look in the eyes. Just a fellow pulling together a lot of facts about vitamin A. Many a significant trend is caught at a desk like this after evading the men and women who work directly with the chemical glassware, the animal cages and the infrared spectrophotometers.

DPI research is strongly concentrated on vitamin A from a variety of directions—from its organic chemistry, physical chemistry, biological chemistry. From its standardization and its stability in the presence of other substances. Both the products and the production methods of pharmaceutical and food manufacturers who buy Myvax® Vitamin A from DPI benefit from the findings of this concentrated research.

For technical data or quotations on it in bulk or in batch-sized cans of Myvapak Vitamin A, write *Distillation Products Industries*, Rochester 3, N. Y. Sales offices: New York, Chicago, and Memphis • W. M. Gillies and Company, Los Angeles, Portland, and San Francisco • Charles Albert Smith Limited, Montreal and Toronto.

"Myvapak" is a trade-mark.



*leaders in research
and production of vitamin A*

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G-15

- *easier to filter from hardened stock
- *shortens filtration cycle
- *improves color of hydrogenated oil
- *can be reused many times
- *eliminates post-bleaching in some cases

...and here's how you save with this new dry-reduced hydrogenation catalyst

Larger nickel-particle size is the key to the superior performance of G-15 . . . the new Girdler catalyst for hardening of oils. This simplifies filtration of the catalyst from the oil product, which in turn shortens the filtration cycle, and improves oil color and quality. Functioning as a selective catalyst in oil hardening, it has been widely accepted as one of the most effective catalysts known for the hydrogenation of carbon-to-carbon double bonds.

G-15 is an electrolytically-precipitated, nickel-on-kieselguhr catalyst that is *dry-reduced* and normally suspended in hardened soya flakes. It is the only oil-hardening catalyst on the market produced by the dry reduction method, resulting in relatively large size of nickel particles, as compared to the conventional wet reduction process.

Why not try G-15 and judge for yourself. Samples are available on request. Write Girdler or call the nearest Girdler office today.

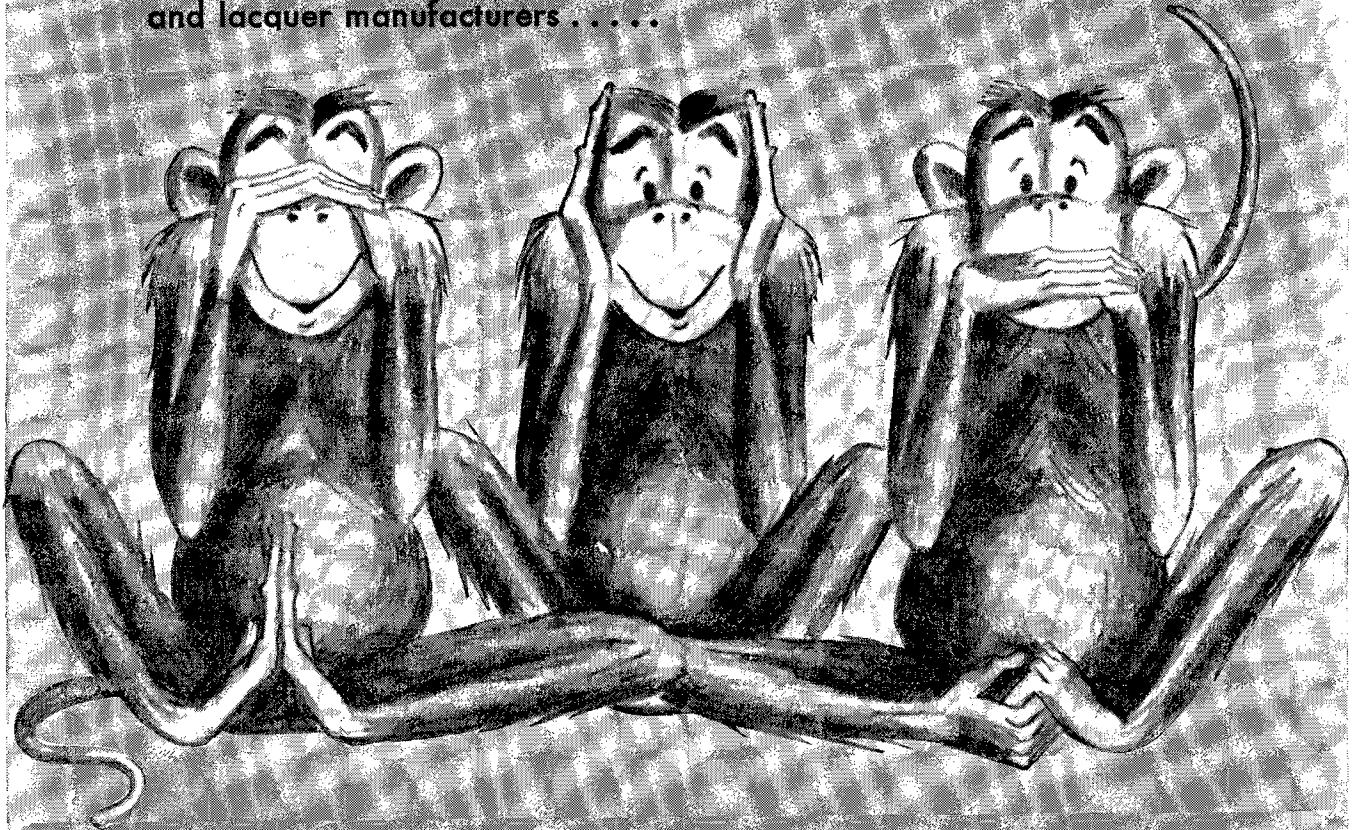
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A DIVISION OF NATIONAL CYLINDER GAS COMPANY

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VOTATOR DIVISION: New York, Atlanta, Chicago, San Francisco

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the leading paint, varnish
and lacquer manufacturers



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Extraction Solvents
except . . .

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Vegetable oil refining technology has advanced to the point where even small reductions in refining losses are important to the economics of plant production.

The Sharples tank car/day research refinery serves as an industry proving ground for accurate comparison and evaluation of methods and techniques under actual plant conditions.

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Great new and original Roche development



100% NATURAL COLOR
with
Total Vitamin A Potency

FOR MARGARINE

When you use vitamin A 'Roche' and beta carotene 'Roche' blended in vegetable oil you get *natural color* and *vitamin A potency* in one plant operation.

You may have vitamin A acetate or palmitate 'Roche' and beta carotene 'Roche' blended in vegetable oil to your specifications so that your margarine safely delivers the required vitamin A value of 15,000 U.S.P. units per pound and also meets your color requirements. Roche does the blending and delivers the material to you in sanitary tin cans which are especially suitable for batch mixing. Vitamin A and beta carotene 'Roche' dissolves readily in warm margarine oils with uniform distribution throughout the batch.

No more messy mixtures of separate colors are needed. Beta carotene 'Roche' imparts a true natural color without tinge of green. It does not change to a reddish color as do some vegetable pigments during storage.

Beta carotene is the *natural*, non-toxic coloring matter of butter and other dairy products. It gives your food added nutritional value, too.

Adopt this modern Roche method of *fortifying* and *coloring* your margarine in *one operation*. Specify vitamin A with beta carotene 'Roche.' Ample supplies are assured.



Batch size cans of Vitamin A and Beta Carotene 'Roche' blended in vegetable oil to your specifications.

Beta **CAROTENE** 'Roche'

FOR SHORTENING and other foods

Beta carotene 'Roche' makes your good foods better because it gives them true, *natural* yellow color and at the same time *adds nutritional value*.

Available in a 24% semi-solid suspension, beta carotene 'Roche' supplies 400,000 U.S.P. units of vitamin A activity per gram. The amount of beta carotene 'Roche' required to color a pound of shortening represents 8000-9000 U.S.P. units of vitamin A.

Processing is simplified. The 24% semi-solid suspension of beta carotene 'Roche' dissolves readily in warm fluid shortening to give you uniform distribution of color and a substantial amount of vitamin A activity.

Plan now to put this new Roche product to work for you. Get the benefits of *natural color* and *added nutritional value* in your shortening.

24% Semi-solid Suspension of Beta Carotene 'Roche'
400,000 U.S.P. units per gram 'Roche' beta carotene in vegetable oils.



33-pound steel pails, double Synthetazine lined, with removable-replaceable-leverlok cover.



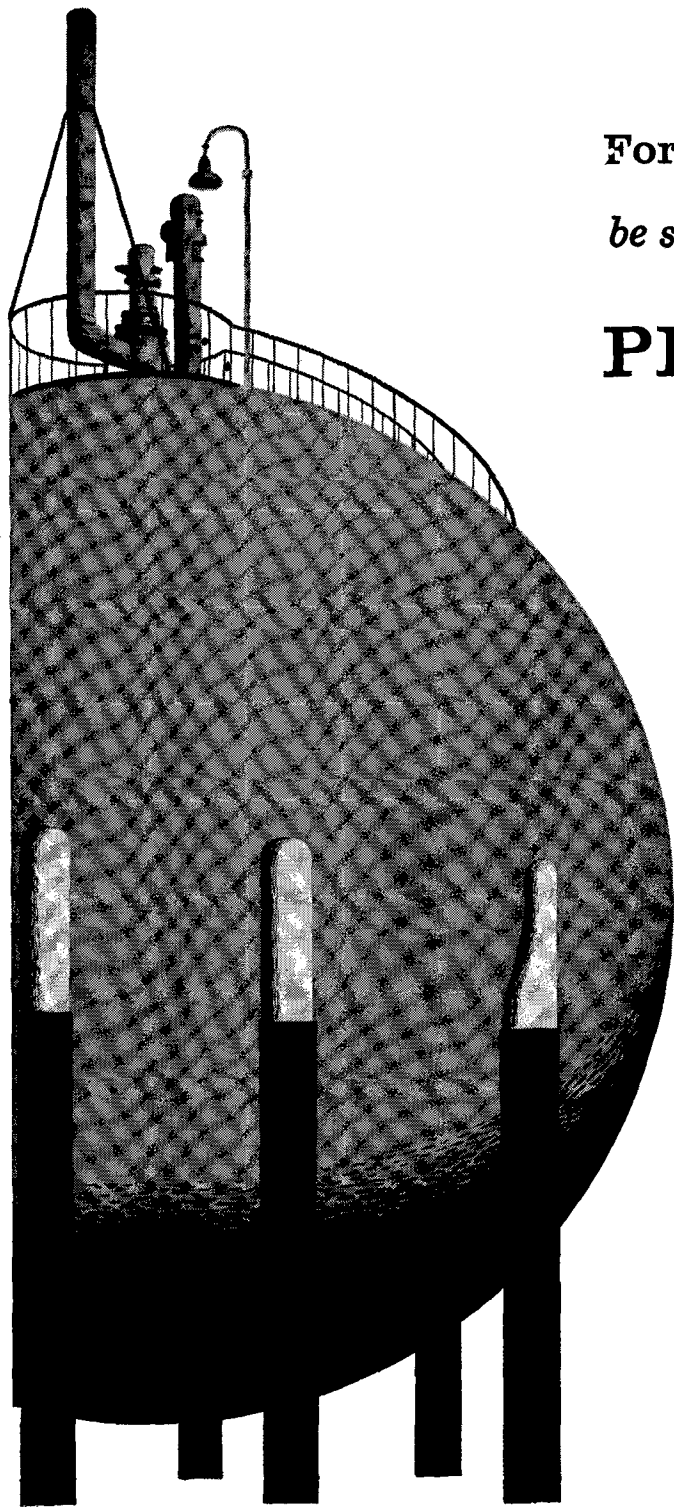
3-pound tripartite temperproof metal cans.

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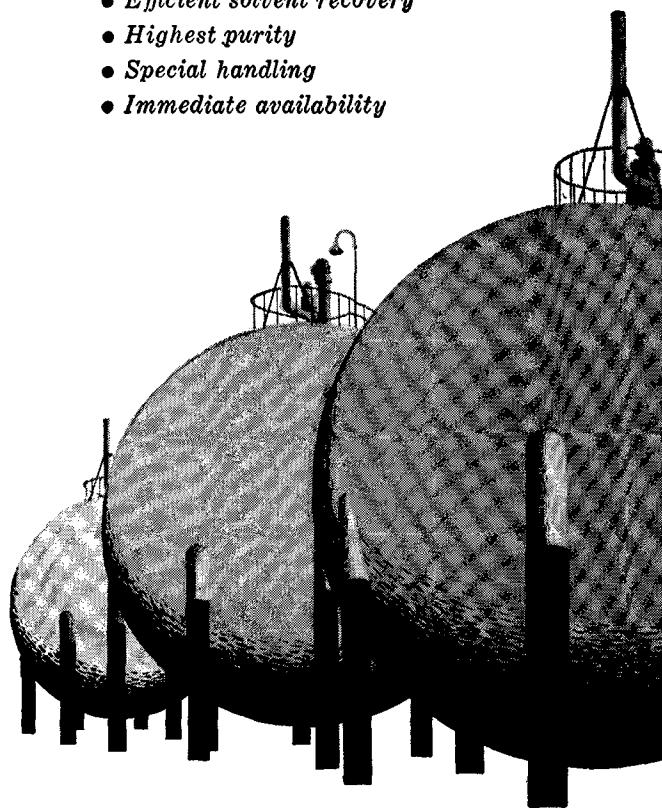


For more economical processing
be sure you specify

PENOLA HEXANE

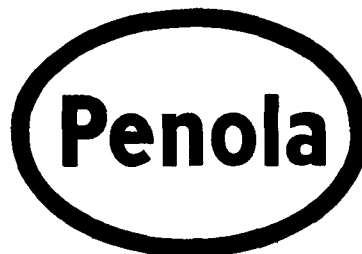
Penola Hexane assures you high efficiency with these 7 important features:

- *High oil recovery*
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- *Efficient solvent recovery*
- *Highest purity*
- *Special handling*
- *Immediate availability*



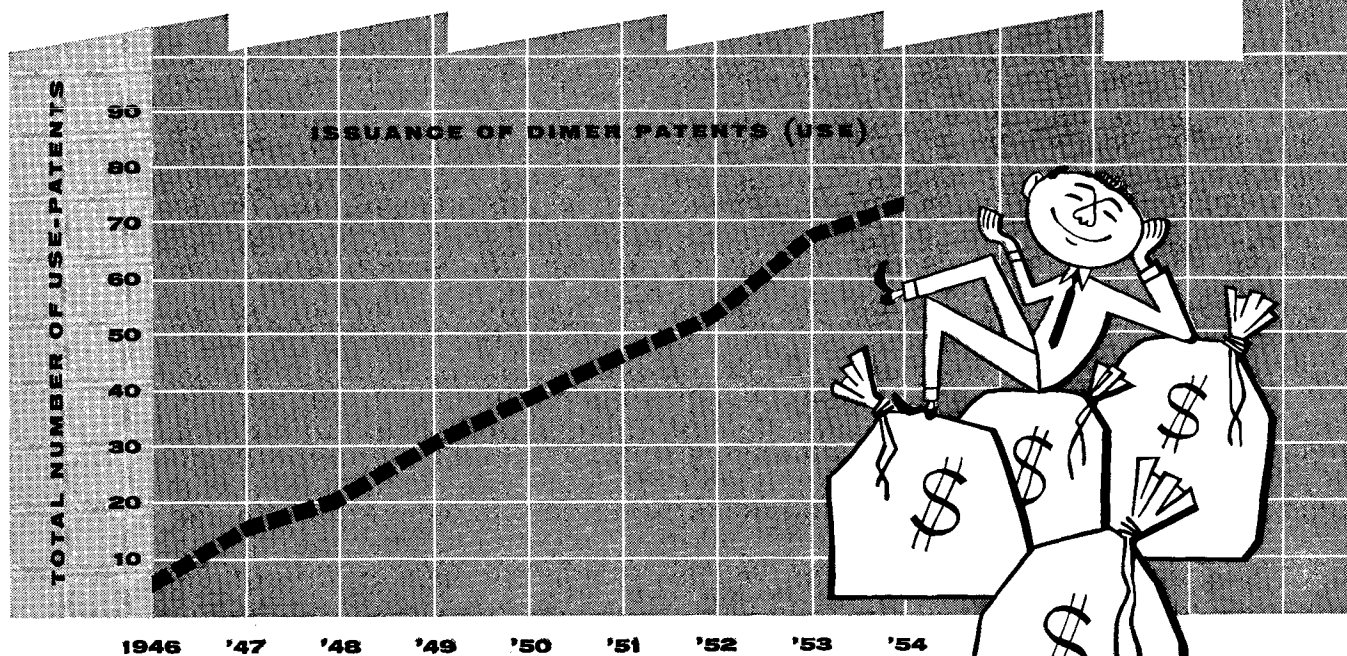
For your processing needs be sure to specify Penola Hexane for the most efficient and economical performance.

For expert technical assistance and any technical data you require regarding *your* processing operations, be sure to call the Penola Office nearest you.



Penola Oil Company *New York • Detroit • Chicago*

every year more use-patents
are issued to U. S. companies based on
EMPOL® 1022 POLYMERIZED FATTY ACID



enjoy the rewards
of this unique **DIBASIC ACID**—
investigate it today!

There is no more dramatic proof of the versatility of this unsaturated, high molecular weight, dibasic acid than the number of use-patents which have been issued to U. S. companies. These aggressive firms, in the last seven years, have exploited Empol 1022 with profitable vigor. The result has been a host of new uses for polyesters, polyamides, esters, amides, soaps, and other derivatives in such fields as adhesives, coatings, petroleum, surfactants, resins, and rubbers.

But, the discovery of all these uses for Empol 1022 Polymerized Fatty Acid has by no means exhausted the possibilities. Its unique combination of high viscosity, excellent heat stability, dibasic structure, and relatively high molecular weight (C_{36}) still offers unlimited opportunities to alert research organizations. Why don't you investigate Empol 1022 and see how it can be transformed into profitable end-products?



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Plastolein Plasticizers
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- Technical information on Empol 1022
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