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- ★ Reads percent moisture directly
- ★ Dries and weighs simultaneously
- ★ Measures 25 gram or 5 gram samples, either solids or liquids
- ★ Endorsed by hundreds of users including:

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Extremely rapid, accurate and reproducible moisture determinations are made by weighing and drying the sample simultaneously. Drying is by infrared radiation and weighing is by a sensitive null-point torsion balance. Heat rays are so shielded as to have no effect on weighing mechanism.

*Write for Bulletin No. 1210B*

No. 26675 Cenco Moisture Balance, **\$226.50**  
No. 26678 disposable pans for solids or liquids,  
Pkg. of 25, **\$2.20**  
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# Kodak reports to laboratories on:

making one's point vividly in a learned journal . . . a real heavy ion with a triple charge . . . film you can switch from black to white and back again (and again)

## Cut-rate color

A beautiful photograph of *Castilleja linearifolia* in full color might have been printed in this space.

A set of four printing plates would have been required—magenta (known to printers as “red”), cyan (known to printers as “blue”), yellow, and black. Arrangements would have had to be made for the page to go through four impressions under exacting conditions of register and inking. We could have afforded it and so could almost any other firm listed on the New York Stock Exchange.

To a certain national wildflower society, however, which does have a beautiful color transparency of *Castilleja linearifolia* to reproduce in its bulletin, this order of expenditure is enough to chew its whole publication budget into shreds. Such figures have scared off many other societies and publishers of periodicals and books aimed at smallish audiences.

Very well, we have devised a cut-rate color printing method. It is intended for press runs of not much more than 2,500 copies. It dispenses with the black plate, depending on overprinted heavy inking for rendering dark areas. It permits none of the laborious hand work that's back of the exquisite effects achieved in some color advertisements and none of the color correction by electronic computing circuitry, used for editorial color illustrations in some mass magazines. It would hold down the soaring flight of an advertising art director's creative imagination.

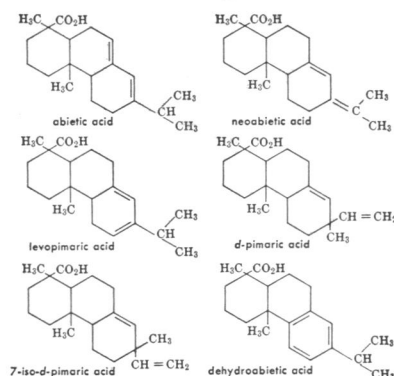
But, by George, it's color printing, and it might be just the ticket for the scientist with a few Kodachrome or Ektachrome slides that

drive home the whole point he wants to make. Matter of fact, it was him we developed the process for.

Eastman Kodak Company, Graphic Reproduction Division, Rochester 4, N. Y., can supply the names of some printers who know all about the “3-color short-run” process.

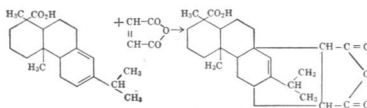
## In early spring sap

When the bark of a longleaf pine is scraped down into the sapwood, the wound exudes an item of commerce called gum oleoresin. This consists of a mixture of  $\alpha$ - and  $\beta$ -pinenes, sold as gum turpentine, plus a mixture of the following resin acids:



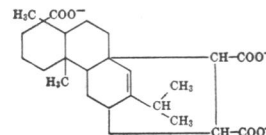
Dancing to the tune of temperature and pH, the loose protons and the double-bond electron configurations can twinkle around in these isomers like so many animated electric signs. If you do your work in the cold, you'll find that levopimaric acid is the largest single component of these resin acids; it is particularly dominant in early spring sap.

The levopimaric acid—and only the levopimaric acid—reacts exothermically with maleic anhydride, Diels-Alder-wise, to yield our new *Maleo-pimaric Acid* (Eastman 7151):



With the aid of a little sodium hydroxide, this can pick itself up a solvating charge at three places and

go floating off to new adventures with all that molecular weight, water-soluble as you please.



Think, particularly, of the interesting esters it would make.

You take it from here. 100 grams of Maleo-pimaric Acid (Eastman 7151) costs \$3.00. It and roughly 3500 other Eastman Organic Chemicals come from Distillation Products Industries, Eastman Organic Chemicals Department, Rochester 3, N. Y. (Division of Eastman Kodak Company).

## We pre-expose, you de-expose and re-expose

Great reputations for cleverness around the laboratory have been built by that happy breed who carry around scraps of information like the following to bring forth at moments of decision:

There is a film (called *Kodak Autopositive Film* and sold by Kodak Industrial and Graphic Arts Dealers) which comes from the factory with a stupendous latent blackness that can be wiped clean with yellow light and be put back with white light. The density it gives, if developed and fixed without exposure, is 6, which means that light passing through is attenuated by a factor of 1,000,000. If before processing, however, 3,000 foot-candles of illumination fall for two minutes on the film through a piece of *Kodagraph Sheet- ing, Yellow*, the same development and fixation leave it almost as clear as window glass. A briefer exposure without the yellow sheeting restores the latent density. One can swing back and forth thus dozens of times. The principle is simply that radiation of wavelength shorter than 420 m $\mu$  builds latent density and radiation from 420 m $\mu$  to 750 m $\mu$  cuts it.

Price quoted is subject to change without notice.

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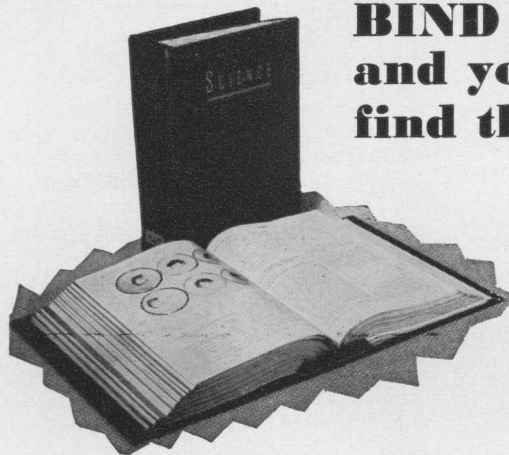
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