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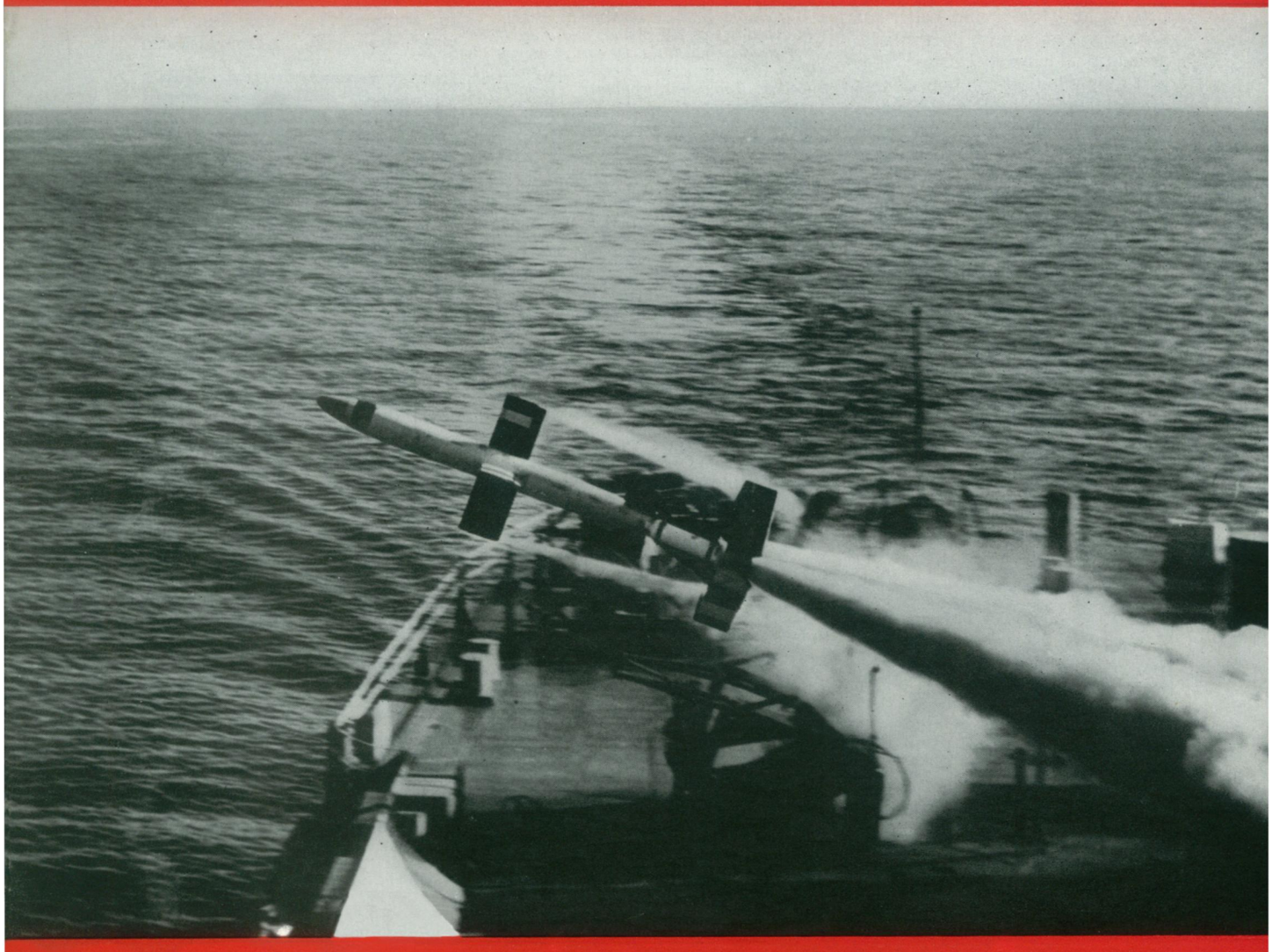
SCIENCE NEWS LETTER

®

THE WEEKLY SUMMARY OF CURRENT SCIENCE



Lark Launching

See Page 387

A SCIENCE SERVICE PUBLICATION

Kodak reports to laboratories on:

a reagent for the isolation of ketones . . . a new cellulose acetate sheeting . . . identifying solids by refractive index . . . checking precision gears

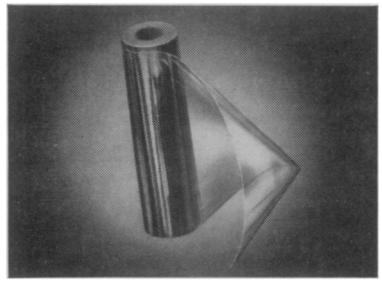
To capture ketones

Let us say you wish to demonstrate the particular ketone setup whence arises the subtle flavor that makes caraway seeds taste so good in cookies or in fresh rye bread. *p-Hydrazinobenzenesulfonic Acid* has the useful property of forming easily cleaved condensation products with ketones but does not react at all with aliphatic aldehydes. From the cleavage of the condensation products, yields of 70% and better are reported. You cannot do this with aromatic aldehydes because they give only addition compounds that are not converted into true condensation products by splitting off water. Thus you have a reagent for the separation of aliphatic and isocyclic ketones from caraway seed oil, or whatever other essential oils interest you.

For a procedural abstract on isolating ketones with p-Hydrazinobenzenesulfonic Acid (Eastman 1129), *or a copy of the catalog that lists more than 3500 other Eastman Organic Chemicals, write Distillation Products Industries, Eastman Organic Chemicals Department, Rochester 3, N. Y.*

Cellulose acetate sheeting

To the attention of those who quest for a flexible dielectric capable of maintaining its high transparency under prolonged chemical and thermal assault, we commend our new *Kodapak IV Sheet*. Its substance is cast cellulose triacetate, a most durable thermoplastic. It is diaphanous stuff, of the proverbial crystal clarity, but we also make it in matte form. It is an excellent electrical insulator, has higher folding endurance and bursting strength than its predecessors (quantitative data on request). It is readily heat-embossed or drawn. It comes in thicknesses from .001″ to .010″. The thick gauges come in 20″ x 50″ and 25″ x 40″ sheets, and those below .003″ come in sheets of 25″ x 40″, 30″ x 40″, and 40″ x 40″. It is easy to seal by dielectric heating, but if you want to cement it without resorting to special cements, we suggest you first determine whether *Kodapak I Sheet* won't serve your purpose better.



Kodapak Sheet *is supplied by us only in quantities of 200 pounds and over. If you need only a little, we can refer you to a local distributor. Write Eastman Kodak Company, Cellulose Products Sales Division, Rochester 4, N. Y. (The answer, like all correspondence from Kodak, will come in an envelope with a Kodapak window.)*

Refractive index liquids

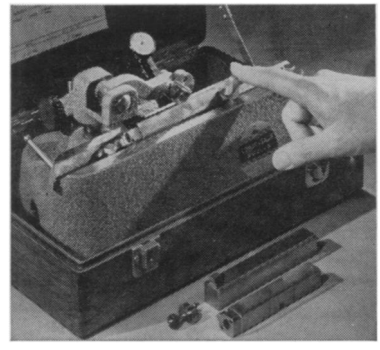
Vast is our respect for up-to-date techniques like polarography, x-ray spectrography, infrared spectrophotometry, mass spectrometry, nuclear magnetic resonance, etc. Proud are we of our chemists who put out thick, comprehensive monographs on the various modalities of instrumentation for today's analytical chemistry. So we *are* aware that among the young and excessively sophisticated it may be considered primitive to identify a solid compound by immersing it in a liquid of matching refractive index to make it disappear without dissolving. *We* think it is not primitive at all but even elegant, in the scientific sense. On page 214 of the current catalog of Eastman Organic Chemicals there appears a list of 39 organic liquids with their refractive indices, ranging from *Methanol* at $n_D^{20} = 1.3289 \pm .0005$ to *Diiodomethane* at 1.7400. If you order them in lots of 10 or more, we can supply them in 25-cc glass-stoppered bottles. Since most of them are priced at 60¢ each in this size, you and we can, for as little as $6 plus postage, work out a deal on a set.

If you don't have a copy of "Eastman Organic Chemicals, List No. 38" from which to make your selection, write Eastman Organic Chemicals Department, Distillation Products Industries, Rochester 3, N. Y.

Gear testing

The Kodak Conju-Gage Gear Checker is purely a mechanical device. It has little to do with photography, optics, chemistry, electrons, x-rays, or crystal structure. Its function is to determine how well a gear works. (We got into this sort of thing through building fire-control equipment.)

A gear's job is to transmit angular motion uniformly from one shaft to another. The precision with which it accomplishes this task can



be tested by measuring variations in center distance when the gear is run with a master of known accuracy. There's the rub. If the gear you are interested in must be of the highest obtainable accuracy, what will you use as a master? Naturally, we wouldn't ask the question if we didn't know the answer. It is a Kodak Conju-Gage Worm Section, which resembles a rack and is produced by thread grinding, a process not subject to the accuracy limitations that come into play on a circular gear. The Worm Section and the instrument we build to use it might interest you if you have any gear worries.

There's more to the gear art than meets the eye of the casual observer. As a gentle introduction to this lore, we can send you "A Practical Approach to Gear Quality" and "The Kodak Conju-Gage Gear Testing Principle." Both are free from Eastman Kodak Company, Special Products Sales Division, Rochester 4, N. Y.

All prices quoted are subject to change without notice.

Kodak
TRADE-MARK

This is one of a series of reports on the many products and services with which the Eastman Kodak Company and its divisions are . . . *serving laboratories everywhere*