

NEW PRODUCTS AND EQUIPMENT

Prepackaged Kjeldahl Reagents



Kel-Pak Powders produced by Laboratory Reagents Inc. contain the necessary test chemicals mixed in proper proportions for accurate Kjeldahl determinations. The manufacturers claim that prepackaged powders permit accurate nitrogen determinations to be run in less time and at no increase in costs than conventional methods. Formulas used in the Kel-Paks are conformed with those in the standard methods of A.O.A.C. **PE1**

Protease Substrate Kit

One of the important tasks in biological research is the isolation and the termination of enzyme systems.

Substrates specific for certain proteolytic enzymes would aid in the differentiation and classification of enzyme fractions derived from tissues or bacteria.

Mann Research Laboratories has prepared a kit consisting of 9 vials of 100 mg. of selected substrates (plus one activator) specific for the following enzyme systems in the table below.

Pertinent references are supplied with each kit. **PE2**

ENZYME SYSTEM	SUBSTRATE
Aminopolypeptidase	Leucylglycylglycine
Carboxypeptidase	CBZ-glycyl-L-phenylalanine
Chymotrypsin	CBZ-glycyl-L-phenylalanine amide
Dipeptidase	Glycylglycine
Ficin	Benzoylglycine amide
Leucylpeptidase	Leucylglycine
Papain	Benzoylarginine amide and cysteine hydrochloride as activator
Pepsin	CBZ-L-glutamyl-L-tyrosine
Trypsin	Benzoylarginine methylester hydrochloride

Boron Free Cotton Defoliant

Tumbleaf-ML, a new liquid cotton defoliant, has been developed by the Agricultural Chemicals Department of American Potash & Chemical Corporation.

Tumbleaf-ML is notable because, being a colorless liquid, it is completely soluble in water and will not clog equipment or stain cotton. In addition, it contains no boron, a desirable feature in areas in which soil has an oversupply of boron chemicals. American Potash & Chemical's Tumbleaf, developed two years ago contains boron and is suitable for areas with a deficiency of the chemical. **PE3**

Fertilizer Spreader Metering Device

Highway Equipment Co. has introduced a metering device for use with its commercial fertilizer and lime spreaders. The attachment is claimed to eliminate much of the guesswork in fertilizer application by enabling the operator to determine proper feedgate openings for different application rates.

The metering attachment fits all late model New Leader twin disc spreaders and is simple to operate. **PE4**

Microspectrophotometer Analyzes Both Micro And Macro Samples

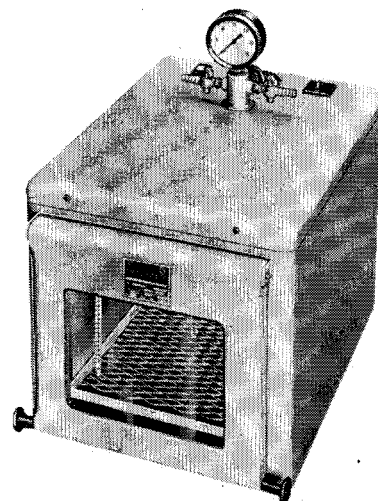
A double beam microspectrophotometer that can be used to analyze solutions in volumes ranging from as small as 0.015 ml. up to several milliliters is available from Jarrell-Ash Co. The versatility of the new instrument is the result of a design feature that allows the use of interchangeable micro and macro cuvettes of the appropriate volume and path length. No other change of components or settings is necessary when switching from one sample to another.

The new instrument utilizes a single meter that is calibrated to indicate the

ratio of the optical densities of concentrations. This simplified system produces readings that are linear with concentration, reduces the lapsed time per sample to approximately 30 seconds and makes possible time reaction studies.

Interchangeable ultra violet and visible light sources are provided with the instrument. Spectral range covers the area from approximately 210 to over 600 millimicrons/mm. and monochromator dispersion is 4.4 millimicrons/mm. **PE5**

Controlled Temperature Vacuum Oven



Thelco Vacuum oven, redesigned by Central Scientific for greater accuracy and durability. Among improvements in the remodeled oven: ribbon type heater elements, operating at black heat for longer life; hydraulic thermostat with external adjustment knob; insulated cast aluminum working chamber; top hinged door for easier closing and economy of work bench space **PE6**

Tagged Amino Acids

Three amino acids tagged with carbon 14 are available from Bio-Rad Laboratories. Available in one millicurie standard packages, these are: DL-norleucine 2-C-14, DL-norvaline 1-C-14, and DL-norvaline 2-C-14. The latter two compounds, having specific labels in two different positions, are expected to be particularly useful in studies involving the mechanisms of amino-acid metabolism. **PE7**

See coupon, page 1049, for further information