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CHEMICALS

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Acetonitrile, C.P.
Acid, Cinnamic, C.P.
Acid, Glutamic, C.P.
Acid, Glyceric, C.P.
Acid, Lauric, C.P.
Acid, Linoleic, C.P.
Acid, Oleic, C.P.
Acid, o-Phenolsulfonic 33% pure
Acid, Pyruvic, C.P.
Acid, Selenious, C.P. cryst.
Acid, Stearic, C.P.
Acid, Sulfosaliclyc, C.P.
Acid, Uric, C.P.
Aluminum Borate, C.P.
Aluminum Bromide, C.P. cryst.
Aluminum Iodide, C.P. anhyd.
Aluminum Lactate, C.P.
Aluminum Oxalate, C.P.
Aluminum Silicate, C.P.
Ammonium Sulfamate, C.P.
Antimony (tri) Iodide, C.P.
Antipyrine Benzoate, C.P.
Barium Oxalate, C.P.
Benzidine, C.P. white
Benzidine Hydrochloride, C.P.
Benziil, C.P.
Benzole Anhydride, C.P.
Betaine Hydrochloride, C.P.
Bismuth Acetate, C.P., basic
Bismuth Sulfate, C.P.
iso-Butyl Alcohol, C.P.
Cadmium Oxalate, C.P.
Cadmium Phosphate, C.P.
Caffeine Hydrochloride, C.P.
Calcium Aluminate, pure
Calcium Butyrate, C.P. normal
Calcium Nitrite, C.P.
Cascarol, C.P.
Casein Acids to Hammarsten
Charcoal, Sugar, C.P.
Chloralose, C.P.
p-Chlorothionyl, C.P.
Cobalt Chloride, Roseo
Copper Formate, pure
Copper Hydroxide, C.P. green
Glycyr Rhizinate, C.P.
Diacetin, C.P.
a-Dichlorohydrin, C.P.
a-Dichlorohydrin, tech.
p-Dimethylamino benzaldehyde.
C.P.
2,4 Dinitroresorcinol, C.P.
a-a-Dipyridil, C.P.
Phenyldiazine, C.P.
Diphenyl Benzidine, C.P.
Ethoxy Heteroanilide, C.P.
Ethyl Succinate, C.P.
Ferric Phosphate, ppt., pure, insoluble
Ferric Potassium Sulfate, C.P.
Glutathione, C.P.
Glycine, pure, medicinal
Glycogen, C.P.
Histamine Dihydrochloride, C.P.
Hydrazine Hydrate, C.P.
Hydrazine Sulfate, C.P.
Hydroxylamine Hydrochloride, C.P.
Hydroxylamine Sulfate, C.P.
Inuline, C.P.
Lead Sulfate, C.P. ppt.
Magnes. Benzoate, C.P.
Magnes. Chromate, C.P.
Magnes. Oxalate, C.P.
Mercury Oxycyanide, pure
Monobromonaphthalene, C.P.
Monobutyrate, C.P.
Mono Methyl Aniline, C.P.
Mono Methyl Aniline, tech.
S-Naphthylamine Acetate, C.P.
a-Naphthol, C.P. recryst.
Nickel Oxalate, C.P.
Nicotine Alkaloid, C.P.
Nicotine Salicylate, C.P.
p-Nitrofenol, C.P.
a-Nitroso-b-Naphthol, C.P.
Orcin, C.P.
a-Phenyl Alamine, C.P.
Phenyl Acetate, C.P.
Phosphylacetone, C.P.
Phenylhydrazine Hydrochloride, C.P.
Picrotoxin, C.P.
Piperine, pure
Potass. Benzoate, C.P.
Potass. Methyl Sulfate, C.P.
N-Propyl Acetate, C.P.
Resorcinol Monobenzoate, C.P.
Semicarbazide Hydrochloride, C.P.
Sodium Benzene Sulfonate, C.P.
Sodium Ethyl Sulfate, C.P.
Sodium Selenate, C.P. cryst. (hydrated)
Stannic Iodide, C.P.
Stannaous Oxalate, C.P.
Tetraamethane, C.P.
Thallous Nitrate, C.P.
Tristearin, C.P., M.P. 71-72° C.
Turnbull's Blue (paste)
Tyrosine, C.P.
Uranium Sulfate, C.P.
Zinc Sulphide, C.P.
Zirconium Nitrate, C.P.
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Beckman pH News

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BECKMAN LABORATORY METER
USED FOR MARINE RESEARCH

Deep Sea pH Measurements
For Study of Plankton

SWEDEN: A Beckman Laboratory pH Meter was recently installed on the research ship "Skagerak" for making sub-surface determinations of pH on seawater. These investigations are to be carried out in the North and Baltic Seas to determine the conditions of temperature, pH, etc., best suited to the development of Plankton. Plankton is an aquatic vegetation which has received consideration as a possible source of food.

An interesting phase of this work will be the use of a special immersion head developed by National Technical Laboratories to permit pH determinations to be made in situ on sea water with the Beckman Glass Electrode at depths as great as 100 feet.

NEW HIGH TEMPERATURE ELECTRODE FOR RESEARCH

PASADENA: The National Technical Laboratories has recently announced the development of a High Temperature Glass Electrode that provides high accuracy and long life under high temperature operations to 100° C. (212° F.). This electrode was made possible by the development of a special electrode glass which is fused into the tip of the Beckman High Temperature Electrode. This announcement is of interest to many chemical industries where adequate pH control heretofore has not been feasible, due to the fact that conventional glass electrodes deteriorate rapidly under high temperature operations.

Field tests have shown that this new Beckman High Temperature Electrode possesses unusual resistance to attack by most chemical solutions at high temperatures.

Complete information on any of the above applications will gladly be sent on request. National Technical Laboratories, 3330 E. Colorado Street, Pasadena, Calif.

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A new folder E-132 describing these two models in detail will be sent on request, Bausch & Lomb Optical Co., 642 St. Paul Street, Rochester, N. Y.
THE CURRENTS OF THE PACIFIC OCEAN AND THEIR BEARING ON THE CLIMATES OF THE COASTS

By Dr. H. U. SVERDRUP

SCRIPPS INSTITUTION OF OCEANOGRAPHY, UNIVERSITY OF CALIFORNIA

I feel greatly honored by addressing you here on this island which was made and made beautifully by man, the shores of which are washed by the waters of the Pacific Ocean, and which now during this great exposition offers a marvelous display of arts, crafts and industries from the many countries around that big ocean.

I stand here, however, with mixed feelings, partly because my personal experiences of the Pacific Ocean are limited and of recent years, and partly because I always feel that it is a shame to reduce winds and waves, the ever shifting sky of the sea, and the vast expanse of the ocean to a series of graphs in black and white such as those which I shall use to illustrate part of my address to-day. However, I can not bring to you the fogs of the Bering Sea, the blue waves of the trade-wind belts or the icebergs of the Antarctic. I have to present my subject in a cut-and-dried fashion, but I feel confident that you will not leave with the impression that the Pacific Ocean is as undisturbed and behaves in so law-abiding a fashion as appears from my graphs. You are familiar with the sea and know that it is ever-changing and tantalizing to those who try to understand its moods, but to-night I must generalize and simplify.

My address will fall into two distinct different parts. In the first place, I wish to give a review of the currents of the Pacific Ocean and, in the second place, I...