

squirrel monkeys (*Saimiri sciureus*). Brachial plexus myelin contained a larger amount of sphingomyelin and smaller amounts of cholesterol, lipid galactose, ethanolamine phosphoglyceride, choline phosphoglyceride, and alk-1-enyl ether than spinal cord myelin when compared as ratios to total lipid phosphorus. The peripheral nervous system myelin had a higher proportion of protein. All of these differences were statistically significant. Thus peripheral nervous system myelin and central nervous system myelin differ in protein content and lipid composition in this subhuman primate.

SPIN-LABELLED LIPID-PROTEIN COMPLEXES. M. D. Barratt, D. K. Green and D. Chapman (Unilever Res. Lab., The Frythe, Welwyn, Herts, Great Britain). *Biochim. Biophys. Acta* 152, 20-7 (1968). A study of the isoctane-soluble complexes formed between mixtures of phospholipids and some basic proteins has been made using the technique of spin-labelling. The ESR spectra of the spin-labelled proteins (cytochrome c, lysozyme, histone, protamine and poly-L-lysine) were observed for aqueous solutions of the proteins, aqueous dispersions of the lipid-protein complexes and isoctane solutions of the same complexes. An ionic combination of phospholipids and basic proteins was directly confirmed by the results. The freedom of motion of the spin-label molecules with respect to the protein depends on the hydrophobic property of the phospholipid chains, which, because they are not directly involved in the complex formation, take up a conformation dependent upon the solvent. Calculation of the reorientation correlation times of the labelled complexes in isoctane suggests the predominant existence of a complex formed between an individual protein molecule and several phospholipids.

ENZYMATIC HYDROLYSIS OF SPHINGOLIPIDS. VII. HYDROLYSIS OF GANGLIOSIDES BY A NEURAMINIDASE FROM CALF BRAIN. Z. Leibovitz and Shimon Gatt (Dept. of Biochem., The Hebrew Univ.-Hadassah Med. School, Jerusalem (Israel)). *Biochim. Biophys. Acta* 152, 136-43 (1968). A neuraminidase has been partially purified by extracting calf brain acetone powder with Triton X-100. It has an optimal pH at 4.4 and hydrolyzed tri- and disialogangliosides as well as "hematoside." It did not hydrolyze monosialoganglioside, sialyllactose nor a sialic acid-containing glycoprotein. The sialic acid residue of "Tay-Sachs' ganglioside" could be split off only after previous treatment with β -N-acetylhexosaminidase. A pathway for the total degradation of brain gangliosides by the neuraminidase and four other brain enzymes is presented.

• Drying Oils and Paints

HYDROGENATED CASTOR OIL-ORGANIC DIISOCYANATE RHEOLOGICAL AGENT. F. M. Frank. *U.S. 3,360,389*. A composition is claimed, comprising: (a) a hydrogenated castor oil-organic diisocyanate reaction product, the diisocyanate being selected from the group consisting of arylene, polyalkylene, alkylene, alkylidene and cycloalkylene diisocyanates and constituting 2 to 12% by wt. of the reaction product, and (b) an emulsifiable polyethylene wax having molecular wt. 1500 to 6000, acid number from 0 to 50, saponification number from 9 to 25, a penetration hardness from 1 to 6 and a melting point from 208 to 221F, the polyethylene wax being present in an amount up to about 80% by wt. on the total weight of the composition.

PROCESS OF PRODUCING SOLUTIONS OF METAL SOAPS OF EPOXIDIZED FATTY ACIDS IN AN ALKYL PHENOL. A. Szezepanek and G. Koenen (Chem. Fabrik Hoesch K. G.). *U.S. 3,365,403*. A process for producing solutions of metal soaps of epoxidized fatty acids in an alkyl phenol is claimed, comprising the steps of: (a) mixing an epoxy compound obtained by epoxidizing a fatty acid such as oleic, palmitoleic, ricinoleic or linoleic acid, or a lower alcohol ester of any of these acids, or a glycerol ester of the same fatty acids, castor oil or linseed oil; (b) with a soap-forming metal compound selected from the group consisting of oxides, hydroxides, carbonates or salts of an organic acid of alkali metal, alkaline earth metal, cadmium, zinc, lead, nickel, cobalt, manganese, copper, beryllium, tin, cerium and bismuth. The reaction is carried out at a temperature below 100C in an alkyl phenol medium until the metal soap formation is complete, at which point volatile reaction products are distilled off under vacuum.

(Continued on page 244A)

• New Literature

DREW CHEMICAL CORPORATION is marketing Co-Freez, a pre-emulsified vegetable fat for filled dairy products. Co-Freez has many of the same properties as milk fat and can be used equally well with milk solids non-fat from fluid, condensed skim milk, non-fat dry milk or any combination of these, thus simplifying imitation dairy product formulating. (Dairy Division, Drew Chemical Corporation, 416 Division St., Boonton, N.J. 07005.)

New literature on the Series RD5 Multipoint Recorder is available from BARBER-COLMAN. This potentiometer-type instrument is only 8 $\frac{7}{8}$ in. wide and 10 $\frac{1}{2}$ in. high. Yet, it makes use of a full 6 $\frac{1}{2}$ in. chart and handles up to 12 measurement points. Solid state circuitry is used. The measuring circuits are fully shielded and guarded. Common mode and series mode rejection is high. Three different printout configurations are incorporated. A simple screw driver adjustment makes it easy to change from one type of printout to another. (Bulletin 1221.5 DB 3-3. Barber-Colman Company, Industrial Instruments Division, Rockford, Ill. 61101.)

"Microorganisms: Concepts in Qualitation and Quantitation," by Seymour Kirschner, of the GELMAN INSTRUMENT COMPANY, Ann Arbor, Michigan, is a survey and review of the various methodologies in microbiology. Reprints of the paper, originally presented before the 53rd annual meeting of the Chemical Specialties Manufacturers Association, are now available upon request. (Information Department, Gelman Instrument Company, P.O. Box 1448, Ann Arbor, Mich. 48106.)

A new, 6-page technical bulletin on a series of rotameters that operate at pressures up to 5000 psi has been announced by BROOKS INSTRUMENT DIVISION OF EMERSON ELECTRIC Co. Designated the Series 1400 High Pressure Indicating Rotameters, these instruments are intended for services where the advantages of a glass tube rotameter would normally be ruled out because of pressures above the safe operating level for glass. Brooks Series 1400 Rotameters feature an equalizing system that balances the pressure on the tube wall and permits operation in a previously prohibitive pressure range. (Hatfield, Pa.)

• Fats and Oils Report

(Continued from page 218A)

Conclusion

There are ways in which soybean oil futures can be used by the coconut oil industry for protection and perhaps additional profit. But it should be remembered that this is only a simulated hedge and not a true hedge because: 1) Coconut oil is not deliverable on SBO futures contracts. 2) The two oils are subject to diverse dynamic influences. 3) Coconut oil prices are for California or other points and SBO futures are based on Decatur, Illinois, making this an out-of-position situation. 4) Prices of SBO are largely controlled by governmental actions and the relationship of soybeans and soybean meal prices.

Thus use of SBO futures in this situation must be thought of in terms of one speculative position offsetting another, rather than as true hedges. But, as we have demonstrated, there is a reasonable degree of predictability which can offer reduced risk.

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