employed. A 100% difference in relative humidity was maintained across the films. The permeability constant, P, was calculated using the equation,

$$P = \frac{(w)\,(x)}{(A)\,(t)\,(p)}$$

where w is the weight of water vapor, in grams, diffusing through a film of thickness x, in centimeters, and area, A in square centimeters, during the time t, in seconds, when the vapor pressure difference p is measured in millimeters of mercury. The permeability constants obtained are recorded in Table I and those for the saturated acyl groups are shown graphically in Fig. 4.

Permeability decreased as the chain length of the fatty acid group increased. The presence of unreacted hydroxyl groups apparently had no significant effect on permeability, which is in agreement with data on glycerides obtained in our laboratory. Heretofore, no data on the permeability of amylose esters have been published. Using slightly different test conditions, Rankin *et al.* (12) obtained a permeability constant of 760×10^{-12} for a film of amylose. The permeability of amylose acetate is slightly higher than that reported for cellulose acetate (17). The lowest value obtained, 15×10^{-12} for the stearate, was slightly larger than that of polystyrene (1,5). The value for paraffin wax, probably the most impermeable of organic compounds, has been reported to be 0.17×10^{-12} (15).

When the amylose ester films were removed from the moisture cups after the measurements had been completed, it was observed that the more permeable films had become hazy.

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Report of the Uniform Methods Committee, 1961

The meeting of the Uniform Methods Committee was held at 2 p.m., October 30, 1961, during the Chicago fall meeting. K. E. Holt, R. J. Houle, R. A. Marmor, L. D. Metcalf, E. F. Sipos, E. M. Sallee, editor, and D. L. Henry were present. Visitors were: R. W. Bates, L. A. Baumann, R. C. Stillman, and M. E. Whitten.

Progress reports submitted by many of the Technical Committees were discussed with interest. These reports indicate that much good work is being done on needed methods. No recommendations were received to change existing methods or to adopt new ones, and no changes are recommended by the Uniform Methods Committee.

Respectfully submitted,

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