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Vapor Pressure of Iodine Monochloride

Jacob Cornog
University of Iowa

Eldon Bauer
University of Iowa

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REPORTS
VAPOR PRESSURE OF IODINE MONOCHLORIDE

JACOB CORNOG AND ELDON BAUER

The Pearce and Snow dynamic method of measuring vapor pressure has been adapted to the measurement of the vapor pressure of iodine monochloride in the solid and liquid phases. Heats of sublimation, vaporization and fusion were obtained by application of the Clausius-Clapeyron equation.

CHEMISTRY DEPARTMENT
UNIVERSITY OF IOWA
IOWA CITY

THE DIFFUSIONS COEFFICIENT OF HEMOGLOBIN
IN PURE WATER SOLUTION.

F. E. KITE, DONALD A. KING AND W. G. EVERSOLE

Carbon monoxide hemoglobin prepared from beef blood by the method of Marshall and Welker (J. Am. Chem. Soc., 35, 820. 1913) was allowed to diffuse from a water solution of constant concentration into pure pater contained in a thin flat cell of optical glass.

The cell containing the diffusion column along with other cells of the same thickness containing appropriate standard solutions was illuminated at intervals by a beam of parallel light of wave lengths (5600-5700 A) corresponding to an absorption band of the solute. The transmitted light fell on an Eastman Spectrographic Plate, Type III-D.

Concentrations at different levels in the diffusion column were determined in terms of the standards from the photographic density of the negative. The diffusion coefficient was calculated from these data by the method used previously in this laboratory.

The diffusion coefficient was found to have a minimum value of 2.2×10^{-7} cm.^{2}/sec. at a concentration of 0.94 grams per 100 cc. of solution. The limiting value at infinite dilution was 4.2×10^{-7}. All solutions were salt-free and unbuffered, so that these values are not comparable with literature values.

DEPARTMENT OF CHEMISTRY,
STATE UNIVERSITY OF IOWA,
IOWA CITY, IOWA