From **MONSANTO CHEMICAL COMPANY**

At Anniston, Alabama

cc H.K.Mason-St.Louis EXCH
F.B.Zienty-St.Louis
H.L.Hubbard-St.Louis
E. E. Hardy

Date March 5, 1954

To Mr. P. G. Benignus Reference

At St. Louis Subject AROCLOR VAPOR PRESSURES

I am sending you another copy of the vapor pressure report from Southern Research Institute.

The data were plotted on larger graph paper and the same general slopes of the vapor pressure lines were obtained. Since these vapor pressure data were obtained over the temperature range of 37.5 to 98°C., they should be better than previously extrapolated data and should be used whenever we have calls for the vapor pressure data.

Equations for the straight lines drawn from the vapor pressure data at 37.5 to 98°C. are:

$$\text{Log } P = -\frac{4,240}{T} + 10.7 \qquad \text{valid for Aroclor 1242}$$

$$\text{Log } P = -\frac{4,240}{T} + 10.2 \qquad \text{valid for Aroclor 1248}$$

$$\text{Log } P = -\frac{3,780}{T} + 8.62 \qquad \text{valid for Aroclor 1254}$$

The question was raised by Dr. White as to whether the samples tested would be typical. They would like to make check determinations for an additional fee. The attached letter refers to this inquiry.

I am of the opinion that the Aroclor samples used are typical of our production. The vapor pressure data indicate that the material are typical. Further analyses of different lots would probably show a slight difference, but not enough to make any difference. I do not believe the vapor pressure should be reported to more than one significant figure at this low range.

You will notice the caution not to use Southern Research Institute's name in any advertising of the vapor pressure data.

A. M. Ellenburg

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