THE BARNARD FREE SKIN AND CANCER HOSPITAL

WASHINGTON AND THERESA AVENUES

SAINT LOUIS 3, MISSOURI

July 14, 1951

Dr. R. Emmet Kelly, Medical Director
Monsanto Chemical Company
1700 South Second Street
St. Louis, Missouri

Re: Project #M-45 Pydraul F-9
(Report on Patch Testing)

Dear Dr. Kelly:

Patch test were performed to determine the irritant and sensitizing properties of Monsanto's hydraulic fluid, Pydraul F-9. The material was used full strength.

In a general way, the tests were conducted in accordance with the procedure recommended by Drs. Louis Schartz and Samuel M. Peck in Reprint #2552, Public Health Reports, Vol. 59, #17 (April 28, 1944).

The technic employed was as follows:

1. Pieces of 4 ply gauze cut into 1.5 cm. squares were saturated with the above solution, Pydraul F-9, applied to the skin of the upper arm and covered with standard Elastopatches (Duke Mfg. Co.).

2. The patches were removed in 24 hours and the site of application observed at that time and again in 48 and 72 hours.

3. After 10 or more days had elapsed, the patches were re-applied, and steps 1 and 2 repeated.

Two hundred and five white volunteers were tested. Their ages ranged from 14 to 70 years. The average age was 32.8 years. There were 141 males and 64 females.

There was no evidence of primary irritation on first application of the patches, and the attempt to produce sensitization by re-testing was unsuccessful in the 205 volunteers.

If the procedure recommended by Schwartz and Peck is sufficient to distinguish between chemical compounds that are innocuous when applied to the skin and other compounds that are primary irritants or sensitizers, then it would seem that Monsanto's Pydraul has no primary irritant effect, nor is it a sensitizer of high potency. Henderson and Riley (J. Invest. Dermat. 6:217-220 (June)1945) applied statistical principles to the results obtained from patch testing. According to their formula, if no positive reactions are found in 200 subjects, the maximum rate of positive reactions in the population from which the sample was drawn will be 1.5 per cent.

COMMUNITY CHEST MEMBER

DSW 586440

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They express [redacted] at the 95 per cent likelihood level - that is, the estimate is [redacted] to agree with the results obtained from the patch testing [redacted] population on 95 per cent of the time. Until further evidence [redacted] or sensitizing action on the skin is found, we believe it [redacted] to assume that individuals may be exposed to hydraul.

Very truly yours,

LAWRENCE K. HALPERN, M. D.

Approved:

Richard S. [redacted]

COMMUNITY CHEST MEMBER

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