

bcc: D. R. Pogue - LOS ANGELES

April 25, 1968

Miss Elnor Perry, R. N.
McCulloch Corporation
6101 West Century Blvd.
Los Angeles, California 90045

Dear Miss Perry:

Mr. Pogue, of our Los Angeles Office, has asked me to forward toxicity and safe handling information relative to our fire-resistant hydraulic fluid, Pydraul 312.

The oral toxicity of Pydraul 312 shows an LD₅₀ to rats of 6500 mg/kg and it is classified as "practically non-toxic" from the acute oral point of view.

When applied to the skin undiluted and allowed to remain overnight, a barely perceptible redness occurred, giving a maximum score of 1.3/8.0, which was classed as a slight irritant. The material proved capable of being absorbed through the skin in high doses when allowed to remain on the rabbit under a cuff. The minimum lethal dose was somewhere over 2000 and under 3000 mg/kg. This would fall into the "slightly toxic" range.

The material is a slight eye irritant when applied undiluted to the rabbits' eyes and there was mild discomfort and slight redness. The maximum score was 13/110 and the eye had returned to normal within three days.

Rats survived six-hour inhalation exposure to the vapors evolved at ambient temperatures following the passage of air through the material. No systemic effects were noted.

We conclude from the above that accidental ingestion on the part of humans is not a particular hazard in view of the high oral lethal dose in rats. Similarly, single massive skin exposures should not be immediately hazardous. The lethal dose obtained in skin penetration studies is such, however, that prolonged and repeated skin contact should be avoided because of possible systemic effects. In addition, prolonged and repeated skin contact may lead to skin irritation.

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Miss Elnor Perry

-2-

April 25, 1968

We also feel that vapor inhalation should be avoided when the fluid is heated to elevated temperatures. Such exposure again relates to prolonged or repeated exposures rather than short-term massive or acute exposures. In the case of the latter, workmen would not voluntarily expose themselves to concentrations that are hazardous because of irritation of the respiratory tract.

I have enclosed a copy of a summary of our interpretation of the data for Pydraul 312.

If I can be of any further help, please let me know.

Sincerely,

M. N. Johnson, M. D.
Assistant Medical Director

MNJ/ln
enc.

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