

July 28, 1967

Mr. Tom Schmidt
Kiekaefer Mercury Corporation
Plant No. 2
Cedarburg, Wisconsin

Dear Mr. Schmidt:

Dave Hosmer has asked me to forward toxicity information for our fluid, Pydraul 625.

In appropriate animal toxicity studies, we have obtained the following data:

Oral Toxicity in Rats

The Oral LD₅₀ of this fluid was placed at 34.3 grams per kilogram with lower and upper limits of 32.6 to 36.5 grams per kilogram. This indicates that the compound is relatively harmless from a standpoint of oral ingestion.

Oral Toxicity in Rabbits

The Minimum Lethal Dose in rabbits for this fluid was 4.25 to 5.00 grams per kilogram. The animals in this experiment did not appear to develop any paralytic symptoms. These data indicate considerable difference between the rat and rabbit work also. These data indicate that this fluid is only slightly toxic from a standpoint of oral ingestion to rabbits.

Skin and Eye Irritation in Rabbits

This fluid was also tested for skin and eye irritation. These tests indicate that this fluid is a rather mild skin irritant with a score of 0.3 out of a possible 8.0 and a mild eye irritant with a score of 10.0 out of a possible 110.0.

DSW 018671

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Vapor Inhalation in Rats

Animals were exposed to saturated atmospheres of the vapors at room temperature. There was no evidence of toxicity, but probably very little vapor was carried over into the chamber. The animals were then exposed to a vapor inhalation of the fumes volatilized by dropping liquid onto a surface heated to 200°F. Rats were exposed for eight hours to a moderate concentration; This caused salivation and nasal discharge. There were no evidence of toxicity with the exception of local irritation. This was a rather large vapor concentration inasmuch as the condensate caused the fur of the animals to become damp. We, then, exposed the rats to such a heavy concentration that they were obscured in the chamber. This caused nasal discharge and redness of the eyes and nose. No systemic damage occurred.

The interpretation of the above data is that Pydraul 625, from the acute point of view, does not possess a great amount of toxicity. However, from the structure of the material and other data, we would warn against repeated or continuous skin contact as well as inhalation of the fumes at above room temperature.

Mr. Hosmer commented that one of your employees has developed a form of dermatitis. In the animal experiments summarized above and in the manufacturing and use experience, there has been no indication that Pydraul 625 causes irritation, per se, nor sensitization. The fluid does have good solvent properties and can lead to the drying of the skin and subsequent cracking if there is prolonged or repeated exposure. The fluid acts much like common paint removers or thinners in this respect. We do recommend in all of our bulletins and on our label that good handling practice includes the avoidance of prolonged and repeated contact.

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

Very truly yours,

R. Ernest Kelly, M.D.
Medical Director

REK:cjs

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cc: Dave Hosmer - Chicago
P.S. We would appreciate it if you could find out the nature of the alleged dermatitis without stirring up any real concern on the customer's part. We are interested from the standpoint of the possibility that excessive exposure to the Pydrauls containing Aroclor causing chloracne. Can you check with Schmidt without alarming him as to the reason for our interest?

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