April 27, 1966

Mr. George Pitts
Charles Pfizer Company
Box 88
Terre Haute, Ind.

Dear Mr. Pitts: — Ericsen of our Los Angeles office

Mr. Bredford has asked me to send you toxicity information for our compressor lubricant Pydraul AC. A summary of the toxicity information may be stated as follows:

> In animal toxicity studies with Pydraul AC, the oral lethal dose in rats is approximately 40 grams per kilogram and for rabbits, 3.5 to 4.5 grams per kilogram. The greater sensitivity of rabbits is typical of this type of fluid. This lethal dose is of such an order, however, that the fluid may be considered only "slightly toxic" to man from the standpoint of accidental ingestion of single oral doses. The fluid may be absorbed through the unbroken skin of rabbits in doses resulting in death, but again the minimum lethal dose is such that accidental massive skin exposures to man do not present a hazard. Skin and eye irritation studies with rabbits classify the fluid as a mild irritant. Laboratory animals survived six-hour exposures to an atmosphere saturated with the vapors of the fluid. On the basis of this data, it is concluded that Pydraul AC requires no special handling precautions other than avoiding prolonged or repeated skin contact. Accidental splashing in the eyes will result in moderately severe pain and irritation but no permanent damage should result.

I am not sure what your particular application may be that raises the question of toxicity. We have run some rather limited tests on a particular compressor where the air downstream showed no detectable levels of the lubricant. It must be pointed out, however, that there are many factors which could affect the amount, if any, of

nor any decomposition products.

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of any lubricant in the compressed air. Some of these include the mechanical condition of the compressor, temperature of compressor cylinder walls, variations in operation, etc. If there were any ~~thermal~~ thermal decomposition, we would expect to find HCl, CO, CO_2, phenols, aldehydes, etc. depending on the degree of decomposition. It appears appropriate to us that, regardless of the type of lubricant, if the air is to be used for breathing purposes, a filter should be placed in the line to remove not only any possible lubricant, but moisture, rust and any other possible contaminants.

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If the compressed air is to be used in a food application, we would not expect that there would be any serious problem of adding toxic materials to the food. On the other hand, to prevent contamination or "adulteration," again we believe that a filter in the line is desirable.

If I can be of any further service, please do not hesitate to let me know.

Very truly yours,

Elmer P. Wheeler
Manager, Environmental Health
Medical Department

EPW:mjb

cc: C. Larry Bradford - Monsanto General Offices