bcc: H. .. Vodden - RUABON

April 14, 1971

Medical Director
FIAT
Turin, Italy

Dear Doctor:

I have been asked to report to you on our work experience and toxicological experience with Pydraul 312 and 312A. Pydraul 312 is a hydraulic fluid composed of an organic phosphate ester, a high viscosity petroleum fraction and some polychlorinated biphenyl. For ecological reasons, the polychlorinated biphenyl has been replaced by another chlorinated hydrocarbon.

We have carried out toxicological screening on this material and we find that the oral LD_{50} for rats of 312A is 7350 mg/kg in comparison to 5330 mg/kg for the 312. The acute MLD for rabbits for skin absorption was greater than 5010 mg/kg for the 312A, while the comparable figure for 312 was 3160. Skin irritation and eye irritation were about the same, both being slight irritants--somewhat less than 10% Ivory soap, as far as the eye is concerned.

I do not think you will have much problem from the toxicological point of view. Should the material contact the eye, all that would be needed is flushing with water. Accidental vapor inhalation seems unlikely unless you are using the material at quite elevated temperatures. I would suggest removal from exposure and use of any sedative cough syrup.

Repeated or prolonged skin contact should be avoided. The treatment here after exposure is washing and replacing the fat removed by use of a lanolin cream. The question of a barrier cream was brought up but I doubt if this would be very satisfactory. I think occasional skin contact can be handled by wiping off the excess material. If a barrier cream were to be considered, I would suggest a silicone-type.

In conclusion, I may say that we have never had any reports of toxicity from our customers from 312, and inasmuch as 312A seems to be less toxic in animals, we would continue to anticipate no problems.

Sincerely,

P. Emmet Kelly, M. D.
Medical Director

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