bcc: G. F. Vague - Detroit
J. R. Fallon - Detroit
R. Davis/R.A. Garcia/D. F. Smit
G. O.

April 16, 1968

Mr. J. S. Falls
Ford Motor Company
Rouge Office Building
3001 Miller Road
Dearborn, Michigan 48121

Dear Mr. Falls:

Our Detroit office has asked me to forward toxicity and safe handling information on our fire resistant hydraulic fluid, Pydraul 312.

I have enclosed a copy of our bulletin entitled, "Toxicity and Safe Handling of Pydraul 312." In addition, I thought you might be interested in the more detailed data discussed below.

The oral toxicity of this product shows an LD_{50} 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.

DSW 018623

STLCOPCB4005167

Clinically, we have had no cases of illness occurring in our employees during the manufacture and distribution of this material, nor have we had reports of injuries from the field.

However, there is no question but that a potential of injury could occur should the fumes evolved at elevated temperatures be breathed for long periods of time or repeatedly. Likewise, the action of the material on the skin causes defatting but, even more so, repeated or continuous skin contact must be avoided to prevent absorption of the material with systemic effects. I repeat, however, these conditions have not come to my attention.

If you have any further questions, please write directly to me.

Sincerely,

R. Emmet Kelly, M.D.
Medical Director

RMK:ejs

Enclosure

DSW 018624

STLCOPCB4005168