October 10, 1966

ITT Cannon Electric
566 East Dyer Road
Santa Ana, California

Attention Mr. J. D. Hitt

Gentlemen:

Don Pogue has asked me to forward toxicity and safe handling information for Pydraul A-200.

Animal toxicity studies with this product have indicated that the oral lethal dose ($LD_{\ }$) to rats is 10,500 milligrams per kilogram. The lethal dose when the material was applied undiluted to the unbroken skin of rabbits is approximately 1250 milligrams per kilogram.

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.

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.

The use of Pydraul A-200 in industrial hydraulic fluid applications should not present toxicity hazards during the transfer of the fluid from original containers to the hydraulic system. Obviously when the fluid is within the hydraulic system, there should be no exposure and consequently, no hazard. In the event of rupture of hydraulic lines and subsequent splashing or spraying of the fluid on the heated

surfaces, vapors of the fluid and possible decomposition products (depending on the temperature of the heated surface) may be irritating if inhaled to the degree that workmen will not voluntarily expose themselves to toxic concentrations. No hazardous exposure should result during the interval required to shut down the system and obtain suitable respiratory protective devices during repairs to the system.

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

Very truly yours,

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

EPL
MNJ:ojs

cc: Don Fogue