

FILE	<input checked="" type="checkbox"/>	
Destroy	<input type="checkbox"/>	
JTG	<input type="checkbox"/>	
WHH	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
MNJ	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
REK	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
RAM	<input type="checkbox"/>	
EPW	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

July 1, 1965

Mr. I. M. Singer  
 Engineering Supervisor  
 E. I. duPont de Nemours & Company  
 P. O. Box 307  
 La Porte, Texas

Dear Mr. Singer:

I have been asked to forward toxicity and safe handling information on our fire resistant hydraulic fluid, Pydraul 150.

The question of possible carcinogenesis was brought up. This certainly can be dismissed completely, as we have no reason to believe the components of this compound would have this type of action. We have never had the slightest rumor of this from our customers and certainly no tumors have arisen in our workers manufacturing the material. Likewise, there have been no reports of any such tumorigenic action from the type of molecules involved.

The animal toxicity report on Pydraul 150 indicates that it is practically innocuous when fed orally to rats, since the animals survived single doses of 28.5 grams per kilogram with loss of appetite and severe diarrhea as the only toxic effects. The fluid apparently is not absorbed through the unbroken skin of rabbits since this species survived doses up to 9.5 grams per kilogram of body weight. In rabbit skin and eye irritation studies, Pydraul 150 was no more irritating than a 10 per cent soap solution tested similarly.

In cases where workmen have accidentally splashed or rubbed Pydraul 150 into the eyes, there has been severe pain out of proportion to the degree of irritation. This is similar to the situation with most synthetic fluids, as well as with many light petroleum oils. Physicians have used a 0.5 per cent pontocaine solution and ophthalmic cortisone acetate solution to relieve irritation.

DSW 018589

In acute vapor inhalation studies, rats survived a six hour exposure to an atmosphere saturated with Pydraul 150 vapors at room temperature. I would not expect that significant vapor concentrations would be liberated at temperatures up to 100° F.

Based on the animal toxicity data and handling experience, our label includes the following precautionary information:

**CAUTION: CONTAINS CHLORINATED HYDROCARBONS**

Avoid prolonged breathing of vapors or mists.  
Avoid contact with eyes or prolonged contact with skin.

If skin contact occurs, remove by washing with soap and water. Following eye contact, flush with water.

If clothing becomes soaked with fluid, launder before wearing again.

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

Sincerely,

R. Emmet Kelly, M. D.  
Medical Director

REK/ln

cc: Mr. R. A. Garcia

DSW 018590