

11-18-82

#159



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

004587

Subject: Captan, Dermal Penetration Study

To: Homer K. Hall, Chief
Chemical Review Branch #1
SPRD

From: *[Signature]* 11/18/82
Robert P. Zendzian, Ph.D.
Pharmacologist
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Thru: William Butler, Head
Review Section III

BEST AVAILABLE COPY

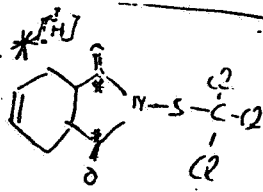
William Burnam, Deputy Chief
Toxicology Branch

Attached is my review of Captan 50-WP: A Dermal Absorption Study in Rats by Joseph S. Ader, Ph.D., July 26, 1982. The study establishes an absorption rate of 1.3%/hour of Captan from Captan 50-WP in the rat. This rate can be used as an upper limit for dermal absorption of captan in man since human skin is generally considered up to five times less permeable than rat skin. However, I suggest that we use the rat rate of 1.3%/hour and only consider differences in permeability if it does not provide an adequate margin of safety.

Also, care should be used in the method of utilization of this rate. Thus, if an individual is exposed to 80 grams during an 8-hour working day, we should not use $80 \text{ gm} \times 1.3\% \times 8 \text{ hr}$ for calculating a total absorption. The absorption calculation should be based on an accumulation of 10 gm/hr during the working day.

Addendum to original 12/18/82:

1. The compound was labeled at the ¹⁴C



9-4 Lc skin

2. This study is considered

acceptable rather than non-supplementing. Lf!

[Signature]

8/5/85
5/5/86

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