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

JUN 29 1989

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

MEMORANDUM

SUBJECT: Cyproconazole (SAN 619F) WG 40: Requested Waiver for the Requirement of a 21-Day Dermal Toxicity Study

TO: Lewis/Grable PM 21
Registration Division (H7505C)

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EPA ID No.: 55947-RGE
Project No.: 9-1121
Caswell No.: 272E
Registrant: Sandoz Corp.

Requested Action

Consider registrant's request.

Background

The registrant submitted a toxicity data package to support the registration of Cyproconazole technical (for manufacturing use only) and Cyproconazole WG 40, the end-use fungicide for sod farm and golf course turf application. TB evaluated this data (EPA memorandum, Swentzel, TB, to Rossi, RD, January 17, 1989) and concluded that a 21-day dermal toxicity with the end-use product is required based on the proposed use and stipulations under CFR 158.135. The registrant has presented comments to support the requested waiver in the current submission.

Registrant's Comments

The registrant contends that sufficient dermal toxicity data have been presented to evaluate the potential dermal irritation and toxicity of both the technical and formulated products and that "this additionally requested study is unlikely to produce any new information." The studies referred to by the registrant are listed below:

Study	Results
I. Technical	
1/ Acute dermal LD_{50} - rat	LD_{50} > 2,000 mg/kg (limit test)
2/ Acute dermal LD_{50} - rabbit	LD_{50} > 2,000 mg/kg (limit test)
3/ Primary dermal irritation - rabbit	non-irritant, Tox category IV
4/ Dermal sensitization - guinea pig	negative
5/ 21-Day dermal toxicity - rabbit (50, 250 & 1,250 mg/kg/day)	evidence of systemic toxicity at high dose only (inhibited body weight gain and food consumption in males, increased AST in males, increased creatinine in females and increased cholesterol in males and females; only the increase in creatinine was statistically significant; clinical changes were not associated with histopathologic changes). NOTE: limit test = 1,000 mg/kg.
II. Formulation (SAN 619 F WG 40)	
1/ Acute dermal LD_{50} - rat	LD_{50} > 2,000 mg/kg (limit test)
2/ Primary dermal irritation - rabbit	non-irritant, Tox category IV
3/ Dermal sensitization - guinea pig	negative

The registrant's second comment concerns the proposed use pattern for the product. They state that Cyproconazole WG 40 is "specifically for use on only golf courses and sod farms with a maximum of 4 applications per calendar year" and that "it is expected that with this use pattern only professional users will be working with this product, and consequently dermal exposure will be minimal."

Response

Considering the absence of adverse effects indicated by data that have been generated in dermal studies with Cyproconazole technical and the WG 40 formulation, as well as the proposed use pattern, TB concurs with the registrant's requested waiver for the requirement of a 21-day dermal toxicity with the WG 40 formulation. However, TB reserves the right to request this study in the future if modified use patterns and/or additional data provide justification.

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