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

SEP 17 1982

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCE

MEMORANDUM

Subject: Metalaxyl Registration Standard
Product Chemistry Chapter

From: Charles L. Trichilo, Chief
Residue Chemistry Branch
Hazard Evaluation Division (TS-769)

To: Henry M. Jacoby, Product Manager No. 21
Herbicide-Fungicide Branch
Registration Division (TS-769)

The Agricultural Division of the Ciba-Geigy Corporation in its letter of March 17, 1982 to Mr. Henry M. Jacoby, has submitted information to satisfy the data gaps of the Product Chemistry Chapter of the subject standard.

1. This information included the octanol/water partition coefficient which is given as log P = 1.65, and the pH which is reported for a 10% suspension as 2-4, and for a 1% suspension as 3-5. These data satisfy data gaps under their respective citations of Table 1 (pp. 19-20). The footnote to Table 2 (p. 34) states that the technical material and its manufacturing-use product are one and the same. Thus data on the technical material in Table 1 apply to the manufacturing-use product in Table 2, and the newly submitted information on pH satisfies the data gap in Table 2 (p. 32) as well.

2. A confidential statement giving information on other ingredients in the technical material was also submitted. Impurities formed and remaining in the material after purification at levels of 0.1% or higher are listed (see CSF, Reg. No. 100-601). [redacted] Furthermore, we see no discussion of the possibility of nitrosamine formation from either metalaxyl or its impurities. The manufacturer should discuss this possibility. Thus the data gap under guidelines citation 163.61-5, Discussion of Formation of Unintentional Ingredients (Table2, p. 32) is not satisfied.

QUALITY CONTROL PROCEDURE INFORMATION IS NOT INCLUDED

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3. We note some ambiguity on the subject of Guidelines citation 163.61, Declaration and Certification of Ingredient Limits (Table 2, p. 32; cf. p. 40). A declaration and certification of ingredient limits will eventually be needed.

4. Information on additional physical chemical properties of the manufacturing-use product were submitted:

   Storage stability: The material has been found to be stable for a minimum of three years at room temperature.

   Flammability: Based on the National Fire Protection Association System, the material has a flammability hazard of 1 (the material must be preheated before ignition can occur). The reactivity hazard is zero (the material is normally stable even under fire explosion conditions and is not reactive with water).

   Oxidizing or Reducing Action: The material has no oxidizing or reducing action.

   Explosiveness: The material is not shock sensitive. The product presents a possible dust explosion hazard. Gr nding should be done in equipment that has a vent ratio of at least one square foot of vent area per 100 cu. ft. of equipment volume. Drying can be done at temperatures up to 200°C.

   Corrosion Characteristics: The material is mildly corrosive to steel and severely corrosive to tin plate.

This information satisfies the data gaps under citations 163.61-8 (12, 13, 14, 15 and 18) of Table 2 (pp. 32-33).

5. We note ambiguity on the subject of guidelines citation 163.61-7, Product Analytical Methods (Table 2, p. 32; cf p. 40). Validation data have not yet been supplied us to establish the reliability of the product analytical method.

6. In addition to the two manufacturing-use products, the registrant has given us the ingredient statements and data for Ridomil 2E, Subdue 2E and Apron 2E. The product chemistry of these three end-use products is now the responsibility of the Registration Division.

TS-769:RCB:C.Trichilo:mch:CM#2:RM810:X77324
cc: Reading File, Circu., C. Trichilo, Metalaxyl S.F.
G. Makhijani, G. Beusch

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