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

AUG 9 1995

MEMORANDUM

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

SUBJECT: Chlorothalonil: Case No. 0097: Chemical No. 081901: Amended Directions for use on Potatoes: CBRS No. 15274: DP Barcodes D213088, D213193, D213196 & D213200.

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THROUGH: Edward Zager, Chief *Edward Zager*
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TO: Cynthia Giles-Parker/James Stone, PM Team 22
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In response to reregistration data requirements ISK Biosciences Corp. has submitted amended directions for use of Bravo 720, Bravo Zn, Bravo Ultrex and Bravo 500 on potatoes.

Background

A tolerance of 0.1 ppm has been established for the combined residues of chlorothalonil and its metabolite SDS-3701 in/on potatoes [40 CFR §180.275(a)].

The 1991 Chlorothalonil DCI required data depicting residues of chlorothalonil and SDS-3701 in/on potatoes harvested 0 days following the last of multiple foliar applications of the 90% DF, a WP, or a FlC formulation. Alternatively, a 7-day PHI was to be imposed. Additionally, the registrant was to propose a maximum seasonal application rate or number of applications per season.

In letters dated August 9-11, 1993, ISK Biotech stated that it would specify a maximum seasonal rate of 9 lb ai/A and a 7-day PHI for potatoes on all pertinent labels. For the 6 lb/gal FlC (BRAVO 720), a 1.13 lb ai/application rate would also be specified. CBRS concluded (W. Smith; memo dated 8/5/94) that these proposed label amendments would fulfill the data.



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requirements for potatoes and that no additional data were required provided that the registrant amended labels as proposed.

In the present submission the registrant is proposing changes in the directions for use on potatoes, which include increased maximum use rates and a shorter retreatment interval. The purpose of this memorandum is to determine if the existing tolerance on potatoes will cover residues from this revised use pattern.

Recommendation

We conclude that combined residues of chlorothalonil and SDS-3701 will not exceed the established tolerance in or on potatoes as a result of the proposed label changes. We recommend that the registrant be notified that the proposed label changes are acceptable, contingent upon similar revision of use directions for all formulations registered for use on potatoes.

Discussion

In the Residue Chemistry Chapter of the Chlorothalonil RED (dated 6/13/95) the established tolerance of 0.1 ppm on potatoes was determined to be adequate assuming that the registrant would change all pertinent labels to impose a 7-day PHI and a maximum seasonal application rate of 9 lbs ai./A. The imposition of the PHI was supported by field trial data reported in MRIDs 00071616, 00087314, 00087323, 00104656, 00147973, 00156523, 40000102 and 40183403 and reviewed in the 1988 draft Chlorothalonil FRSTR. The maximum seasonal application rate was based on the registrants earlier response to an Agency requirement that labels contain either a maximal seasonal rate or specify a maximum number of applications for a season. Since the time of ISK's proposal of a 7-day PHI and maximum rate of 9 lbs ai/A/year, they have determined a potential need for maximum seasonal rates exceeding 9 lb ai/A. The present revised proposal leaves the PHI at 7 days but decreases the minimum retreatment interval for combating late blight from 7 days to 5 days. The application rates remain unchanged at 0.56 - 1.1 lbs ai/A but the maximum application for a growing season is increased from 9 lbs ai/A to 12 lbs ai/A.

The field trial data referenced above represent a wide variety of conditions and application rates, few of which exactly match the label conditions proposed by the registrant. However, the general trends apparent from these trials allow us to conclude that the existing tolerance is adequate to cover the proposed use and that residues on potatoes are not expected to be increased over present levels. Chlorothalonil is a contact fungicide that is not translocated from foliage to potato tubers. Any residues occurring on potatoes are most likely due to contamination from the soil at time of harvest. The available data confirm that the level of residues on tubers is not correlated with the

application rate or number of applications to the foliage so much as it is to the PHI. Residues in the available studies do not exceed the established tolerance 7 days following applications of as much as 9 x the maximum proposed rate (MRID 40183404). We also note that chlorothalonil has been used on potatoes for a number of years with no label restrictions on maximum seasonal rate and with no PHI, yet residue monitoring by FDA and by USDA has demonstrated no significant occurrence of chlorothalonil residues on potatoes. Of 1637 potato samples surveyed by the USDA Pesticide Data Program between 1992 and 1994, only one sample contained detectable (>0.02 ppm) residues of chlorothalonil. Surveillance monitoring of 635 potato samples by FDA and the states between 1989 and 1993 resulted in only two samples containing detectable (> 0.01 ppm) levels of chlorothalonil.

cc: W. Smith, Chlorothalonil Reg. Std. File, SF, RF, Mary Clock (HED/RCAB), A. Ertman (SRRD/RB), circ.

7509C:CB-II:WOS:wos:Rm805A:CM2:305-5353:8/01/95
RDI: Pilot Team (8/01/95) RPerfetti (8/02/95) EZager (8/08/95).