Chlorothalonil

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

SEP 5 1990

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

Memorandum

Subject: Captan. Response to Request for Aerial and Dilute Ground Applications on Apricots, Cherries, Plums, Fresh Prunes, and Nectarines.
No Accession / No MRID No. / No DEB No.

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The Captan Task Force is requesting (letter dated 2/20/90) aerial and dilute ground type applications of captan be permitted on apricots, cherries, plums/prunes, and nectarines.

Tolerances have been established (40 CFR 180.103) for residues of the captan (N-trichloromethylthio-4-cyclohexene-1,2-dicarboximide) for pre- and/or post-harvest uses on various racs including apricots and nectarines at 50 ppm, and cherries and plums/prunes (fresh) at 100 ppm. However, DEB recommended in an addendum to the Registration Standard (see memo by Nan Gray dated 4/22/88) that tolerances be reduced on certain racs providing the registered use on each crop be limited to that specified in the 4/22/88 memo. The tolerance levels recommended (applicable to this request) were 10 ppm in/on apricots, 25 ppm in/on nectarines, 40 ppm in/on cherries, and 15 ppm in/on plums/fresh prunes. Final conclusions on the appropriate tolerance levels are dependent on the results of the storage stability studies. The use of captan on apricots, cherries, plums/prunes, and nectarines was not cancelled in the PD 4 published 2/24/89.

Residue data from the aerial application of captan were requested in the Registration Standard. Field trials have been conducted to compare residue levels resulting from aerial, dilute ground spray, and concentrate ground spray applications on almonds

apples, cantaloupes, grapes, peaches, strawberries, and tomatoes. These data concerning aerial and ground spray applications were reviewed by L. Propst (see memo dated 12/19/89). It was concluded in the L. Propst review that the total residues of captan in/on almonds, apples, grapes, peaches, and tomatoes would not exceed the tolerances recommended by DEB in the 4/22/88 memo when Captan 50 WP is applied aerially. The residues found on strawberries were higher when Captan was applied aerially; however, residues did not exceed the established tolerances. The tolerance to cover residues of captan on cantaloupes was cancelled with a PD 4 Notice dated February, 1989. (These conclusions were made dependent on the outcome of the storage stability studies and that an adequate enforcement method to detect secondary residue in meat and milk must be made available.)

The current request is for the aerial and dilute ground spray applications of captan to apricots, cherries, plums/prunes, and nectarines which all happen to be fruiting trees. The data submitted (referenced above) are summarized below;

Max. Residues of Captan (ppm) on Whole fruit

Commodity[1]	Captan Application Methods		
	Aerial	Dilute ground spray	Concentrate ground spray
apples	0.86	2.84	--
almonds			
meat	<0.05	<0.05	<0.05
hulls	4.48	7.72	6.76
shell	0.15	0.19	0.17
peaches(CA)	4.28	12.30	8.30
peaches(WA)	4.34	5.84	--

1 Treatment; almonds - 18 lbs a.i./A/season (max. label rate), PHI 139-142 days.
apples - 24 lbs a.i./A/season, 0-day PHI (max. label rate).
peaches (CA) - 32 lb a.i./A/season, 0-day PHI.
peaches (WA) - 24 lbs a.i./A/season, 0-day PHI.

The data indicates that captan residues in/on peaches, apples, and almonds (hulls/meat/shell) were lowest as a result of aerial applications and highest for dilute ground spray applications. The recommended tolerances were not exceeded for aerial applications on almonds, apples, and peaches (nut and fruiting trees). Translating the residue data as a result of aerial applications to apricots, cherries, plums/prunes, and nectarines (fruiting trees), it is unlikely that the recommended tolerances would be exceeded as a result of aerial applications of captan.

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Recommendations and Conclusions

DEB recommends that aerial applications of captan be permitted on apricots, cherries, plums/prunes, and nectarines since these types of applications (used at the recommended label rates) should not result in residues exceeding the recommended tolerances of 10 ppm in/on apricots, 25 ppm in/on nectarines, 40 ppm in/on cherries, and 15 ppm in/on plums/fresh prunes.

DEB reiterates that dilute ground spray of captan on apricots, cherries, plums/prunes (fresh), and nectarines were approved in the memo dated 4/22/88 by Nan Gray.

cc: RF, Circ, Reg. Std. File, Subject F, JSmith, PMSD/ISB, RDSchmitt.
RDI: ARathman:09/05/90:RLoranger:09/05/90.
H-7509C:DEB:jss(misc./Capt-air):JSmith:Rm810F:CM#2:09/05/90