

07 AUG 1980

EUP for EPA Reg. No. 677-EUPRO Bravo 500

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Diamond Shamrock Corporation requests an EUP for the use of its fungicide Bravo 500 (40.4% a.i. or 4.18 lb a.i./gal tetrachloroisophthalonitrile, aka chlorothalonil) on soybeans. All food or feed derived from the requested EUP is to be destroyed or used only for seed. The purpose of the EUP is to determine if tank mixes with benomyl are desirable. A total of 1100 acres are to be treated with either chlorothalonil, benomyl or both.

In our recent review of PP#6F1799, RCB recommended for a tolerance level of 0.2 ppm for residues of chlorothalonil and its metabolite, 4-hydroxy-2,5,6-trichlorisophthalonitrile on soybeans. Tolerances are established for residues of chlorothalonil and its metabolite on various r.a.c.'s at levels of 0.1 ppm (pumpkins) to 15 ppm (celery) (40 CFR 180.275). There is a tolerance of 0.2 ppm established for residues of benomyl and its benzimidazole-containing metabolites in or on soybeans (40 CFR 180.294).

The proposed use is for either 0.5, 0.75 or 1.0 lb a.i./A chlorothalonil or 0.125, 0.188 or 0.25 lb a.i./A benomyl or a tank mix of either 0.5 lb a.i. chlorothalonil plus 0.125 lb a.i. benomyl or 0.75 lb a.i. chlorothalonil plus 0.188 lb a.i. benomyl. Two applications are to be made, the first at early pod set and the second 14-21 days later.

For benomyl, this use is less than that which is currently registered (up to 0.5 lb a.i./A) with a PHI of 35 days.

For chlorothalonil, the pending tolerance is established to cover residues from 2 applications of 1.025 to 1.775 lb a.i./A or 3 applications of 0.75 to 1.5 lb a.i./A, with a 6 week PHI. Thus the proposed use of chlorothalonil is lower than that which the pending tolerance is intended to cover. A PHI of 6 weeks should be imposed, consistent with the use in the pending tolerance.

We do not consider the use of a pesticide on crops grown for seed to be a non-food use. The treated soybeans will be indistinguishable from untreated ones and may be diverted for feed use. Additionally, there may be residues in the soybeans and soybean forage and hay grown from treated seed.

A tolerance for residues of chlorothalonil on soybeans will be required, whether it be a temporary tolerance or the permanent tolerance now pending.

Note To PM: Benomyl is in RPAR status; PD4 is being prepared as of 4/24/80.

Conclusions and Recommendations

- 1.) Treatment of soybeans grown for seed is not considered to be a non-food use. A tolerance for chlorothalonil on soybeans is needed.
- 2a.) Residue levels of chlorothalonil and its metabolite, 4-hydroxy-2,5,6-trichlorisophthalonitrile, are not likely to exceed 0.2 ppm (the pending tolerance level) provided a preharvest interval of 6 weeks is imposed.
- 2b.) Residues of benomyl and its benzimidazole-containing metabolites in soybeans are not expected to exceed the existing tolerance of 0.2 ppm from this use.

For the reason given in Conclusion ¹~~1a~~ we recommend ~~to~~ against the requested EUP. We could recommend favorably only if the total crop were to be destroyed or if the pending tolerance for chlorothalonil on soybeans is established and the use amended to include a 6 week preharvest interval.

cc: Reading file
Circu
Reviewer
S.F.

TS-769:RCB:Reviewer:L.Bradley:LDT:X77324:CM#2:RM:810:Date:8/5/80
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