

PESTICIDE BRANCH
P. J. McFARLAND

January 8, 1963

Division of Pharmacology, Toxicology Branch

Revised tolerance proposals for Sevin (1-naphthyl-N-methylcarbamate)
on canberries, leafy vegetables, and root crops.

PESTICIDE PETITION/NO. 368/

Union Carbide Chemicals Co.
New York, New York
(AF 15-522)

The proposed tolerances in Pesticide Petition No. 368 were not established because the Division of Pharmacology Considered Sevin tolerances of 25 ppm on berries and leafy vegetables to be unsafe. The petition had proposed a 25 ppm tolerance for crops in the canberry, spinach, and lettuce groups and a 10 ppm tolerance for various root crops. The proposed PHI's were 3 days for canberries and head lettuce and 7 days for the other commodities.

In an amendment, dated 12/3/62, the petitioner has revised the proposed tolerances, as follows:

<u>TOLERANCE</u> (ppm)	<u>CROPS</u>	<u>PHI</u> (days)
12	blackberries, boysenberries, dewberries, loganberries, and raspberries.	7
12	spinach, beet tops, collards, dandelions, kale, mustard greens, parsley, swiss chard, and turnip tops.	14
10	endive (escarole), chinese cabbage, and salsify tops	14
5	garden beets, horseradish, parsnips, radishes, rutabagas, salsify roots, and turnips	3

A tolerance of 10 ppm was established for head lettuce by Pesticide Petition No. 281. This tolerance is now intended to cover both head and leaf lettuce, and the label specifies a PHI of 3 days for head lettuce (as in Pesticide Petition No. 281) and 14 days for leaf lettuce.

The toxicity of Sevin is discussed in detail in Pesticide Petition No. 329. The "no effect" level is 200 ppm for both rats and dogs.

In Pesticide Petition No. 368 it is pointed out that, with the large number of substances which have 10-ppm tolerances, the raising of the tolerance to 25 ppm on berries and leafy vegetables would lower the margin of safety below 100-fold. It was then recommended to hold withdrawal time on all products to the time needed for the residue to reach 10 ppm.

The above reasoning appears sound and still applicable; since a large number of commodities are to be treated with Sevin (according to Pesticide Petition No. 368 and preceding ones).

The Division of Food finds that maximum residues likely to be found at 14 days would be 8.3 for the lettuce groups and 10.9 for the spinach group. Thus, tolerances of 12 ppm would be adequate for these two groups. It seems likely that no significant hazard is incurred in allowing this slightly higher tolerance.

It is, therefore, recommended that tolerances of 12 ppm be set for the blackberry and spinach groups and that levels for the other two groups (10 ppm for leafy vegetables and 5 ppm for root crops) be granted as the petitioner has requested (12/3/62).

CONCLUSION:

It is concluded that tolerances of Sevin are safe at 12 ppm for blackberry and spinach groups, at 10 ppm for the leafy vegetables, and at 5 ppm for root crops, together with PHI's of 7, 14, 14, and 3 days.

M. L. Quaife

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