

22/10/60
Phlogel
PESTICIDE BRANCH

7-12-13
May 18, 1960

Division of Pharmacology, Toxicity Branch

Extension of the tolerance for Sevin (1-naphthyl N-methylcarbamate).

PESTICIDE PETITION NO. 243

Union Carbide Chemical Co
New York N Y (AP 15-522)

The petitioner requests tolerances of 5 ppm Sevin in or on corn (kernels only and kernels plus cob with husks removed) and 40 ppm Sevin in corn fodder and forage.

The pharmacology of this compound was discussed in our memo of February 16, 1959 (P 9193). In this memo we considered that the "no effect" level for rats and dogs was approximately 200 ppm Sevin.

The requested tolerance of 5 ppm Sevin in or on corn (kernels only and kernels plus cob with husks removed) is safe. Since the "no effect" dosage levels in rats and dogs are approximately 200 ppm, this tolerance in all goods would allow a margin of safety of 40. This margin of safety is increased to over 100 when the fact is taken into consideration that all fruits and vegetables make up approximately 26% of the total human food as sold in the grocery stores, according to the Department of Agriculture, and that corn constitutes only a minor portion of this 26%.

The Division of Food has stated that the cow feeding study submitted shows that with a 40 ppm tolerance in corn fodder and forage no Sevin is found in the meat or excreted in the milk. As much as 450 ppm was given without any being excreted in the milk. They further state that the establishment of a 25 ppm tolerance in corn fodder and forage will be adequate for the proposed usage.

CONCLUSION

The establishment of a tolerance of 5 ppm Sevin in corn (kernels only and kernels plus cobs with husks removed) will be safe. The margin of safety for Sevin will remain greater than 100.

The establishment of a tolerance of 25 ppm Sevin in corn fodder and forage is also safe. At this dosage, none will be excreted in milk or found in meat.

cc DF
cc DP

Jane E. McCaulley

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7/19/60

G. E. Fitzhugh