



12-19-90 R.2.

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

DEC 19 1990

OFFICE OF  
PESTICIDES AND TOXIC  
SUBSTANCES

MEMORANDUM

SUBJECT: PP#0F3866/0H5598. Bayleton (triadimefon) on Wheat.  
Request for Lowering Tolerances to Harmonize With Codex  
Limits.  
MRID No. 0996855, 0009811 & 00149329. DEB Nos. 6761  
& 6762.  
HED Project No. 0-1423.

FROM: Martha J. Bradley, Chemist *M. J. Bradley*  
Chemistry Branch - Tolerance Support  
Health Effects Division (H7509C)

TO: Susan Lewis, PM 21  
Fungicide-Herbicide Branch  
Registration Division (H7505C)

and

Toxicology Branch  
Fungicide-Herbicide Support  
Health Effects Division (H7509C)

THRU: Richard D. Schmitt PhD., Chief *R. Loranger for*  
Chemistry Branch - Tolerance Support  
Health Effects Division (H7509C)

Mobay has submitted a request to lower the tolerance of the fungicide 1-(4-chlorophenoxy)-3,3-dimethyl-1-(1H-1,2,4-triazol-1-yl)-butanone (triadimefon) and its metabolites on wheat grain from 1 ppm to 0.5 ppm and on processed wheat milling fractions (except flour) from 4 ppm to 2 ppm. The new tolerances would allow harmonizing, numerically, with the Codex limit of 0.5 ppm on wheat grain. The wheat forage and straw tolerances would remain unchanged.

Tolerances for triadimefon and its metabolites, 40 CFR 180.410, were established on wheat and barley as a result of PP2F2665.

No Registration Standard was issued for triadimefon.

### **Conclusions**

1. Residues of Bayleton and its regulated metabolites resulting from the proposed use are not expected to exceed the proposed lower tolerances of 0.5 ppm on wheat grain and 2 ppm on wheat milling fractions (except flour).
2. The newly proposed 0.5 ppm wheat grain tolerance would conform numerically with the Codex limit for this commodity.

### **Recommendations**

We recommend for the proposed tolerances of 0.5 ppm on wheat grain and 2 ppm on wheat milling fractions (except flour).

### **Detailed Considerations**

See Review of A. Smith, 9/9/82, PP2F2665 for details of the use of triadimefon on wheat. Only the residue data for wheat grain and processed products will be discussed in this review.

#### **Residue Data**

Residue data representing the maximum application rate of 2 applications of 4 oz ai/A with a 21 day PHI are submitted for a total of 11 studies from the states of CA, GA, IN, KA, MT, NY, ND, TX and Ontario and Alberta, Canada.

Residues of triadimefon and its metabolites ranged from 0.01 ppm to 0.14 ppm with a PHI of 20 to 23 days.

In our original review of this petition, the tolerances were established on barley and wheat based on the higher residues that occur in barley, not on the level actually occurring in wheat. One plausible reason for lower residues occurring in wheat is that the outer coating of the wheat grain is removed in the threshing processing, but this is not the case in barley (reference Grain Cultural Practices file). Thus from the registered foliar application, residues could be lower in wheat than in barley.

From the above residue data, we conclude that residues of triadimefon and metabolites in wheat grain are not likely to exceed the newly proposed tolerance of 0.5 ppm.

A processing study was conducted on wheat grain that had been treated at exaggerated rates. Residues on the raw grain were 0.52 ppm, on bran 1.94 ppm and on shorts 0.69 ppm. Residues

on flour were less than that on the raw grain. The concentration factors are 3.7 ppm for bran and 1.3 ppm for shorts. Thus the processed milling products, except flour, would have residues of 1.85 ppm.

From the above residue data and calculations, we conclude that residues of triadimefon and metabolites in wheat milling fractions would not exceed the newly proposed tolerance of 2 ppm.

#### **International Residue Limit Status.**

The International Residue Limit Status sheet is attached. The lowering of the triadimefon and metabolites tolerance on wheat grain will allow for numerical harmonizing with the Codex limit of 0.5 ppm on wheat grain for triadimefon and triadimenol.

**Attachment: International Residue Limit Status sheet.**

cc: M. Bradley, RF, Circu, PP#0F3866, PIB/FOD (Furlow).  
H7509C:CBTS:Bradley:mb:CM#2:Rm810:557-7324:12/12/90  
RDI:RSQuick:12/14/90:RALoranger:12/14/90

INTERNATIONAL RESIDUE LIMIT STATUS

CHEMICAL Bayleton (Triadimenon)

CODEX NO. 133

CODEX STATUS:

☒ No Codex Proposal  
Step 6 or above

Residue(if Step 8): Sum of  
triadimenon and triadimenol

<u>Crop(s)</u>	<u>Limit</u> <u>(mg/kg)</u>
<u>Wheat</u>	<u>0.5</u>

PROPOSED U.S. TOLERANCES:

Petition No. OF 3866/04 5598

RCB Reviewer M.J. Bradley

Residue: Parent plus metabolite  
containing chlorophenoxy &  
triazole moieties.

<u>Crop(s)</u>	<u>Limit</u> <u>(mg/kg)</u>
<u>wheat grain</u>	<u>0.5</u>
<u>milled fractions</u> <u>(except flour)</u>	<u>2.0</u>

CANADIAN LIMITS:

☒ No Canadian limit

Residue: \_\_\_\_\_

<u>Crop(s)</u>	<u>Limit</u> <u>(mg/kg)</u>
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MEXICAN LIMITS:

☒ No Mexican limit

Residue: \_\_\_\_\_

<u>Crop(s)</u>	<u>Limit</u> <u>(mg/kg)</u>
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