

Evaluation Report for Category B, Subcategory 3.12 Application

| Application Number: | 2018-2503 | |
|--------------------------------|--|--|
| Application: | Changes to Product Labels-New Site or Host | |
| Product: | Pyriofenone 300SC Fungicide | |
| Registration Number: | 32376 | |
| Active ingredient (a.i.): | Pyriofenone | |
| PMRA Document Number : 3013454 | | |

Purpose of Application

The purpose of this application was to amend the label of Pyriofenone 300SC Fungicide to include the use on tomatoes for suppression of powdery mildew (*Leveillula taurica*) and to establish maximum residue limits (MRLs) for pyriofenone in/on fruiting vegetables (Crop Group 8-09).

Chemistry Assessment

A chemistry assessment was not required for this application.

Health Assessments

A toxicological assessment was not required for this application.

The use of Pyriofenone 300SC Fungicide on tomatoes for suppression of powdery mildew is not expected to result in occupational or bystander exposure greater than the registered use of pyriofenone. No risks of concern are expected from the use of Pyriofenone 300SC Fungicide, provided that workers follow the label directions and wear the personal protective equipment identified on the label.

Residue data from field trials conducted in Canada and the United States were submitted to support this application. Tomatoes were treated at ~1.0-fold of the approved application rate, with samples harvested at PHI (0 days). The trials provided for bell peppers and non-bell peppers reflect the same use pattern as that for tomatoes. In addition, a processing study in treated tomatoes was reviewed to determine the potential for concentration of residues of pyriofenone into processed commodities.

Maximum Residue Limit

The recommendation for an MRL for pyriofenone was based upon the submitted field trial data, and the guidance provided in the <u>OECD MRL Calculator</u>. An MRL to cover residues of pyriofenone in/on crops and processed commodities are proposed as shown in Table 1. Residues in processed commodities not listed in Table 1 are covered under the proposed MRL for the raw agricultural commodities (RACs).



| TABLE 1. Summary of Field Trial and Processing Data Used to Support the Maximum Residue Limit | | | | | | | |
|---|---|---------------|----------------|----------|----------------------|-----------------------------|--------------|
| Commodity | Application Method/ Total Application Rate (g ai/ha) | PHI (days) | Residues (ppm) | | Experimental | Currently | Recommended |
| | | | LAF T | HAF T | Processing Factor | Established MRL (ppm) | MRL (ppm) |
| | | | | | Paste: 0.6- fold | | |
| Tomatoes | Foliar Broadcast/ 349-363 | 0 | <0.01 | 0.129 | Puree: 0.3- fold | CG8-09: None | CG8-09 : 0.3 |
| | | | | | Juice: 0.1- fold | | |
| Bell Peppers | Foliar Broadcast/ | 0 | 0.017 | 0.115 | N/A | | |
| | 357-367 | | | | | | |
| Non-bell Peppers | Foliar Broadcast/ | 0 | 0.053 | 0.096 | N/A | | |
| | 360-369 | | | | | | |

LAFT = Lowest Average Field Trial; HAFT = Highest Average Field Trial

Following the review of all available data, the MRL as proposed in Table 1 is recommended to cover residues of pyriofenone. Residues in these crop commodities at the proposed MRL will not pose an unacceptable risk to any segment of the population, including infants, children, adults and seniors.

Environmental Assessment

There are no environmental concerns anticipated with the addition of the use on tomatoes to the Pyriofenone 300SC Fungicide use pattern.

Value Assessment

The applicant submitted the results of efficacy trials to support the claims of management of powdery mildew caused by *Leveillula taurica* on fruiting vegetables (crop group 8-09). Based on the results of the efficacy trials, a claim of suppression of powdery mildew caused by *L. taurica* on tomatoes is supported. Pyriofenone 300SC Fungicide will provide growers with an alternative product for use in an integrated pest management program to suppress powdery mildew on tomatoes.

Conclusion

The Pest Management Regulatory Agency has completed an assessment of the information provided, and has found the information sufficient to support the label amendment to Pyriofenone 300SC Fungicide to include the use on tomatoes and to propose MRLs as listed in Table 1.

References

| PMRA Document | |
|------------------|--|
| Number | Reference |
| 2893148 | 2016, Magnitude of Residues of IKF-309 on Fruiting Vegetables – USA and Canada in 2015, DACO: 7.1, 7.2.1 7.4.1,7.4.2 |
| 2893149 | 2018, Value Summary for Pyriofenone 300SC Fungicide (Reg. No. 32376), |
| | containing Pyriofenone, for Control of Powdery Mildew of Fruiting Vegetables |
| | (Crop Group 8-09), DACO: 10.1,10.2, 10.2.1, 10.2.2, 10.2.3, 10.2.3.1, 10.2.3.3, |
| | 10.3,10.4 |
| 2893151 | 2015, Pyriofenone/tomato/powdery mildew, DACO: 10.2.3.3(D) |
| 2893152 | 2015, Pyriofenone/tomato/powdery mildew - ISK TOMATOES, DACO: 10.2.3.3(D) |
| 2893153 | 2015, Evaluate pyriofenone solo and in rotation on 7 day and 14 day intervals for the |
| | control of powdery mildew in field grown tomatoes for production, DACO: |
| | 10.2.3.3(D) |
| 2893154 | 2017, Pyriofenone/tomato/powdery mildew, DACO: 10.2.3.3(D) |
| 2893155 | 2017, Pyriofenone/tomato/powdery mildew, DACO: 10.2.3.3(D) |
| 2893156 | 2017, Pyriofenone/tomato/powdery mildew, DACO: 10.2.3.3(D) |

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