

Evaluation Report for Category B, Subcategory 3.3 and 3.4 Application

Application Number: 2007-3635
Application: Application Number (B.3.3) and Application Method (B.3.4)
Product: Actara 240SC Insecticide
Registration Number: 28407
Active ingredients (a.i.): Thiamethoxam [THE]
PMRA Document Number: 1624415

Background

ACTARA 240SC Insecticide has been registered since October 31, 2006. ACTARA 240SC Insecticide is registered for in-furrow and seed piece treatment on potatoes to control Colorado potato beetle, leafhoppers and aphids. For specific details of uses, application rates and methods, precautions, restrictions and personal protective equipments, refer to the product label.

Purpose of Application

The purpose of this application is to add foliar use and to change the number of applications of the end-use product ACTARA 240SC Insecticide (Reg. No. 28407), containing 240 g/L of thiamethoxam. The requested rate is 26 g a.i./ha/application with a maximum of two applications per season and a 7-10 day retreatment interval to be applied before pests reach damaging levels. The preharvest interval (PHI) is 7 days.

Chemistry Assessment

A chemistry assessment was not required as there was no change to product chemistry.

Health Assessments

A toxicology assessment was not required as there was no change to the product formulation.

ACTARA 240SC is formulated as a solution concentrate with a similar application rate and use pattern as the applicant's registered product, ACTARA 25 WG. Thus, the foliar use rate of ACTARA 240SC on potatoes fits within the existing use pattern for this active ingredient. No increase in occupational exposure is expected.

Residue data for thiamethoxam in potatoes were not submitted to support the addition of foliar use of this active on the ACTARA 240SC Insecticide label. Previously reviewed residue data from field trials conducted in/on potatoes were reassessed in the framework of this petition.

Furthermore, a comparison of the proposed label and the currently registered label of ACTARA 25WG (Reg. No. 28408) has shown that the rate and timing of the foliar applications to potatoes are the same, the only difference being the formulation type. Based on the similarity of the two formulations and the solubility of thiamethoxam in water, no increase in the magnitude of the thiamethoxam and metabolite CGA 322704 residues in/on potatoes is expected. Accordingly, no increase in dietary exposure is anticipated.

Environmental Assessment

The addition of foliar application to the existing in-furrow use pattern for ACTARA 240SC Insecticide necessitated that an environmental assessment be conducted. As a result of this assessment, environmental label statements regarding aquatic organisms are required. Additionally, 1-m buffer zones are required for protection of freshwater habitats during product application.

Value Assessment

Four trials conducted in Prince Edward Island (1), Ontario (2) and Manitoba (1) were reviewed. The side-by-side trials evaluated the efficacy of ACTARA 240SC (240 g thiamethoxam/L; Reg. No. 28407) compared to ACTARA 25WG (25% thiamethoxam; Reg. No. 28408) applied foliarly at a rate of 26 g a.i./ha to control Colorado potato beetle, leafhoppers and aphids. When pest pressure was high enough to allow for assessment, there was no difference in the level of control provided by either formulation.

Conclusion

The PMRA has completed an evaluation of the subject application and has found the information sufficient to support the addition of foliar use on potatoes under the ACTARA 240SC Insecticide label.

References

Wolf, T and B.C. Caldwell, 2001. Development of a Canadian spray drift model for the determination of buffer zone distances. In Expert Committee on Weeds, Proceedings of the 2001 National Meeting, Quebec City, Sainte Anne de Bellevue, Quebec: ECW-CEM. D. Bernier, DRA Campbell, D. Cloutier, Eds.

PMRA Document Number	Reference
1415649	2007, 10.2.1 - Mode of Action - ACTARA 240SC - Foliar, DACO: 10.2.1
1415650	2007, 10.2.2 - Description of Pest Problem - ACTARA 240SC - Foliar, DACO: 10.2.2
1415651	2007, 10.2.3.1 - Summary of Efficacy and Crop Tolerance Bridging Trials - ACTARA 240SC - Foliar, DACO: 10.1,10.2.3.1,10.3.1,10.3.2

PMRA Document Number	Reference
1415652	2007, 10.2.3.1 - Efficacy Data Summary Table - ACTARA 240SC - Foliar, DACO: 10.2.3.1
1415653	2006, 10.2.3.3 - Trial POT06-1X, POT0630, DACO: 10.2.3.3
1415654	2007, 10.2.3.3 - Trial POT06-1, CAONZI0052006, DACO: 10.2.3.3
1415655	2007, 10.2.3.3 - Trial POT06-2X, DACO: 10.2.3.3
1415656	2007, 10.2.3.3 - Trial POT06-3X, CAMB017602006, DACO: 10.2.3.3

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